

الإمداد والتجارة

EUROPE'S BUSINESS NEWSPAPER

FINANCIAL TIMES

JAPAN

US talks turkey on trade

Page 6

D 8523A

Austria	Swiss	Indonesia	Rep. of Oman	Philippines	Portugal
Bahrain	Qatar	Iraq	Yemen	Malaysia	Peru
Belgium	BPB	Iceland	Yemen	Philippines	Portugal
Cyprus	CGE	Iraq	Yemen	Philippines	Portugal
Denmark	DKB	Iceland	Yemen	Philippines	Portugal
Egypt	ECB	DKB	Yemen	Philippines	Portugal
Finland	FFB	DKB	Yemen	Philippines	Portugal
France	FFB	DKB	Yemen	Philippines	Portugal
Greece	DKB	DKB	Yemen	Philippines	Portugal
Hong Kong	HK\$12	DKB	Yemen	Philippines	Portugal
Iceland	HK\$12	DKB	Yemen	Philippines	Portugal
Ireland	HK\$12	DKB	Yemen	Philippines	Portugal
Italy	HK\$12	DKB	Yemen	Philippines	Portugal
Malta	HK\$12	DKB	Yemen	Philippines	Portugal
Norway	HK\$12	DKB	Yemen	Philippines	Portugal
UAE	HK\$12	DKB	Yemen	Philippines	Portugal

No.30,885

Tuesday July 4 1989

World News

US Supreme Court places restrictions on abortion

The US Supreme Court has imposed new restrictions on a woman's right to an abortion, igniting renewed national controversy on the highly charged political issue. Page 18

Irish breakdown
The Irish Parliament was adjourned following the breakdown of inter-party talks to form a new government after the inconclusive general election of June 15. Page 2

US contract claim
Two co-directors of Mr Denis Thatcher, the British Prime Minister's husband, on the board of a UK public company paid money to a US official in a position to influence the award of a contract in its favour, according to a TV documentary. Page 6

Iranian call
Iran called the US a terrorist state at the United Nations and demanded compensation for the 260 people killed a year ago when a US warship shot down an Iran Air Airbus. Page 1

Syrian release
The Syrian Government has released more than 600 Palestinian, Lebanese and Syrian political prisoners in the past month. Page 4

Gorbachev in France
Mikhail Gorbachev is starting a three-day state visit to France, during which Moscow and Paris will cement political ties by signing bilateral agreements. Page 3

Mexican poll claim
Government claims of victory in Mexican state elections have been contested by the right-wing opposition amid accusations of fraud. Page 6

Italian vacuum
Italy's latest political vacuum moves into its 4th day without any clear indication of when a new government might be formed. Page 2

Shutto returns
The Moslem world's first woman Prime Minister, Benazir Bhutto, is returning to Britain, where she spent two and a half years in exile, for a visit. Page 4

Islamic calling
Egypt's top Islamic authority said all AIDS victims should be killed by denying them food, water and medical treatment. Page 1

Three die in riot
Three people were killed when police opened fire to disperse rioting crowds of Hindus and Moslems in India's western state of Maharashtra. Page 22

Sudan programme
The leaders of Sudan's new military junta have announced a programme calling for military conscription and a diplomatic bid defending their country. Page 4

IRA bombing
The Irish Republican Army claimed responsibility for the bomb blast on Sunday which killed a British serviceman in West Germany. Page 2

Chang defeated
Michael Chang, 17, the youngest ever winner of a Grand Slam tennis tournament in Paris last month, was beaten by fellow American Tim Mayotte at Wimbledon. Page 6

MARKETS

STERLING

New York 1.5535

London 1.5460

DM 1.0275

FF 10.3325 (2.0775)

SF 2.6100 (2.5000)

Y 222.75 (223.00)

Apr 1989 Jul

INTEREST RATES

Federal Funds 8.2%

9.1%

3-month Treasury Bills 8.20%

8.245

Long Bond 10.8%

10.8%

Yield: 8.06% (8.03)

Lenders 9.3%

3-month interbank 14.5% (14.3%)

close 14.5% (14.3%)

Business Summary

Boots makes £800m bid for rival UK retailer

BOOTS, UK pharmacy chain, has launched a £200m cash bid for rival retailer Ward White, but was met with an immediate rebuff by the Ward White board. Page 18

British breakdown

The Irish Parliament was adjourned following the breakdown of inter-party talks to form a new government after the inconclusive general election of June 15. Page 2

US contract claim
Two co-directors of Mr Denis Thatcher, the British Prime Minister's husband, on the board of a UK public company paid money to a US official in a position to influence the award of a contract in its favour, according to a TV documentary. Page 6

Iranian call
Iran called the US a terrorist state at the United Nations and demanded compensation for the 260 people killed a year ago when a US warship shot down an Iran Air Airbus. Page 1

Syrian release
The Syrian Government has released more than 600 Palestinian, Lebanese and Syrian political prisoners in the past month. Page 4

Gorbachev in France
Mikhail Gorbachev is starting a three-day state visit to France, during which Moscow and Paris will cement political ties by signing bilateral agreements. Page 3

Mexican poll claim
Government claims of victory in Mexican state elections have been contested by the right-wing opposition amid accusations of fraud. Page 6

Italian vacuum
Italy's latest political vacuum moves into its 4th day without any clear indication of when a new government might be formed. Page 2

Shutto returns
The Moslem world's first woman Prime Minister, Benazir Bhutto, is returning to Britain, where she spent two and a half years in exile, for a visit. Page 4

Islamic calling
Egypt's top Islamic authority said all AIDS victims should be killed by denying them food, water and medical treatment. Page 1

Three die in riot
Three people were killed when police opened fire to disperse rioting crowds of Hindus and Moslems in India's western state of Maharashtra. Page 22

Sudan programme
The leaders of Sudan's new military junta have announced a programme calling for military conscription and a diplomatic bid defending their country. Page 4

IRA bombing
The Irish Republican Army claimed responsibility for the bomb blast on Sunday which killed a British serviceman in West Germany. Page 2

Chang defeated
Michael Chang, 17, the youngest ever winner of a Grand Slam tennis tournament in Paris last month, was beaten by fellow American Tim Mayotte at Wimbledon. Page 6

GORBACHEV ADVISER TAKES NEUTRAL STANCE • BUSH PROPOSES SOVIET TROOP WITHDRAWAL

Solidarity official offers deal to form non-communist government

By Christopher Bobinski in Warsaw



Polish strategy: General Czeslaw Kiszczak (left), possible Communist Party presidential candidate, with Solidarity leaders Bronislaw Geremek and Lech Wałęsa who have both urged caution

sept Sejm and the 100-seat Senate are due to meet to choose speakers and take an oath for the first time since elections last month when the Solidarity opposition defeated the authorities in Poland's first ballot since 1947.

In his suggestion comes amid much uncertainty over whether either of the two candidates for the post of president - General Wojciech Jaruzelski, the present party leader, whose refusal to stand was not accepted by the Central Committee, or General Czeslaw Kiszczak the Interior Minister - would command enough of a majority in parliament to win the post.

Today both of Poland's parliamentary chambers, the 460-

cate the process of gradual political change in the country.

In his article, Mr Michnik suggested for the first time the formation of "an alliance between the democratic opposition and the reformist wing of the establishment" and argued that Poland's present reforms were "very much in line with the Soviet Union's anti-Stalinist policies."

Since last month's elections, the Polish authorities have been calling on Solidarity to enter a Government, which until now the movement's leaders have refused.

Mr Michnik, however, backed by Mr Jacek Kuron, another Solidarity leader, openly raised the issue of having the opposition form a government in speeches at a two-day meeting of the movement's parliamentary group in Warsaw at the weekend.

Mr Wałęsa, concerned that Solidarity was a possible wave of industrial unrest could sweep the movement away, said: "It's better to stay in opposition."

Mr Bronislaw Geremek, a senior Solidarity strategist who has urged caution, also expressed doubts at the weekend about joining a government, which he said, would in any case have to be formed with a purge at the top.

Mr Wałęsa and Mr Geremek are likely to get support for their cautious stance from the activists who do not want the movement to be tainted with the unpopularity of power during the current series of economic crises in the country.

The Solidarity movement still faces a problem, however, with a political vacuum where it had been assumed there would be a Communist-dominated Government.

Yesterday's article and another commentary, which Mr Michnik has written for today's issue of the paper he edits, are evidence that Mr

Lech Wałęsa the Solidarity leader - who has been arguing behind the scenes that the opposition should enter the government for some weeks - is seeking to force the issue on the movement.

Mr Wałęsa expressed caution at the weekend about the idea. He said that Mr Michnik and Mr Kuron were "young and in a hurry. My view is that we should wait and prepare for free elections in four years' time when we would be ready to take power."

Mr Wałęsa, concerned that Solidarity was a possible wave of industrial unrest could sweep the movement away, said: "It's better to stay in opposition."

Mr Bronislaw Geremek, a senior Solidarity strategist who has urged caution, also expressed doubts at the weekend about joining a government, which he said, would in any case have to be formed with a purge at the top.

Mr Wałęsa and Mr Geremek are likely to get support for their cautious stance from the activists who do not want the movement to be tainted with the unpopularity of power during the current series of economic crises in the country.

The Solidarity movement still faces a problem, however, with a political vacuum where it had been assumed there would be a Communist-dominated Government.

Yesterday's article and another commentary, which Mr Michnik has written for today's issue of the paper he edits, are evidence that Mr

PepsiCo pays BSN \$1.35bn for entry to UK crisp market

By Christopher Parkes, Consumer Industries Editor

BSN, France's biggest food reserves plunged \$2.2m to \$35.6m during June. Page 4

OUTOKUMPUS, part of Finland's state-owned Outokumpu group, has acquired a 51 per cent stake in the Spanish copper alloy semi-products company, Iberica del Colbalt (Ibercol). Page 21

TKOYU Stock Exchange has decided to establish a committee to examine means of admitting new members. Page 23

LAZARD Frères, French merchant bank, has set up a \$207m management buy-out fund to provide equity finance for deals. Page 20

NKK, leading Japanese steelmaker, is to raise nearly \$94.4m through a public share offer. Page 22

ORKEM, French state-owned chemicals producer, and Emimont, Italian chemicals group, have agreed to swap control of subsidiary companies. Page 21

PETRONAS, Malaysia's national oil company, is to invite international bids in November for a \$180m polypropylene plant. Page 6

SOVIET Union needs \$30bn to avoid ruin, a Soviet economist and member of the new parliament said. Page 3

THAI Airways International, Thailand's national carrier, reported pre-tax profits of \$138.2m. Page 22

BOND Corporation Holdings, Australian master company of entrepreneur Mr Alan Bond, has failed to pay back on time most of a \$51.2m loan from its Hong Kong-listed subsidiary. Page 22

REED International, UK printing and publishing group, is proposing plans to increase its borrowing limits. Page 26

SHAREHOLDERS in Bank Leumi, Israel, have criticised Israeli businessman Lambert, US financial家, in the battle to keep hold on the bank after the Government sells its majority stake. Page 20

MARUBENI and Toyo Meika, two Japanese trading houses, have bought 7.5 per cent interest each in Oskarzberg, Australian mining company. Page 22

FAI Insurances, Australian group headed by Rodney Adler, has sold a 14.9 per cent stake in Goode Durrant, UK industrial group. Page 22

RELIANCE Industries of India will raise \$50m from international capital markets to build an oil refinery in Dubai, subject to Indian Government permission. Page 6

YI represents the first response to trade ministerial instructions in April that the group should negotiate effective enforcement means "taking into account differences in national legal systems".

All 12 EC states would "feel comfortable" with the proposal, which probably did not go as far as the US would like

for it to enter into a new agreement on intellectual property protection.

It represents the first response to trade ministerial instructions in April that the group should negotiate effective enforcement means "taking into account differences in national legal systems".

All 12 EC states would "feel comfortable" with the proposal, which probably did not go as far as the US would like

for it to enter into a new agreement on intellectual property protection.

It represents the first response to trade ministerial instructions in April that the group should negotiate effective enforcement means "taking into account differences in national legal systems".

All 12 EC states would "feel comfortable" with the proposal, which probably did not go as far as the US would like

for it to enter into a new agreement on intellectual property protection.

It represents the first response to trade ministerial instructions in April that the group should negotiate effective enforcement means "taking into account differences in

EUROPEAN NEWS

France takes up the torch of EC economic union

By David Buchanan in Brussels

PRESIDENT François Mitterrand plans to use France's presidency of the EC Council of Ministers to get the Community off to a running start in its long marathon towards economic and monetary union.

After convening a special meeting of the 17-member European Commission in Paris on Saturday, the first day of the French six-month presidency, the Government said it would seek adoption of the legislative revisions necessary for Community finance ministers and central bank governors to co-ordinate more closely their policies.

This is the key part of the Delors report's recommended stage one of greater economic and monetary co-operation, which EC leaders agreed last week in Madrid should come into effect on July 1990.

Preliminary discussions about how to carry the Madrid summit's conclusions further will start when finance ministers meet here on July 10 and central bankers meet in Baden on July 1.

But no action can take place until the Commission comes up with revised legislative proposals. This would probably be

at the end of this month, Commission officials predicted yesterday.

The other main goal which France is hoping to reach during its time in the EC chair is adoption of the Commission's proposed social charter as "a solemn declaration" of general principles guaranteeing protection of workers' rights in the intended single European market.

Mrs Margaret Thatcher, Britain's Prime Minister, is in a minority of one in opposing this.

One result of the weekend meeting is that the French Government has agreed to follow the line of Mr Jacques Delors, the Commission president, that the charter should be short of language giving the Commission a mandate to present a new labour policy action programme next year.

This separation is designed to placate Mrs Thatcher's fears about signing up to a charter which the Commission will use as a quarry to mine new legislative proposals.

It is, however, doubtful that the UK leader, knowing that Brussels plans new legislation anyway, will be placated by this.

Rome told to end charge on foreign cheques

By Tim Dickson in Brussels

THE EUROPEAN Commission has ordered the Italian Government to remove a £500 tax which it imposes on foreign cheques of over £50,000 (E23).

The tax, which Brussels pointed out yesterday is charged on cheques cashed by tourists visiting Italy, was the subject of a complaint in 1987 by Eurocheques International, the group which represents the issuers of Eurocheques.

The principle of Eurocheques is that they are paid in full if made out in the currency of the host country and provided they do not exceed the guaranteed amount agreed, which is equivalent to approximately Ecu200 (£300.00).

Yesterday's so-called "reasoned opinion" from the Commission, stating that the tax is discriminatory and contrary to the Treaty of Rome, is the second stage of a legal procedure which could end with an action in the European Court of Justice.

The Rome Government has one month in which to comply.

The Commission, meanwhile, has decided separately that a tax of £200 imposed on both Italian and foreign cheques — and also the subject of the original complaint — is non-discriminatory and therefore not against Community law.

Notice to the Bondholders of CANON INC.

U.S.\$50,000,000 6 1/4 per cent. Convertible Bonds Due 1995
U.S.\$450,000,000 7 per cent. Convertible Bonds Due 1997

Pursuant to Condition 15 of the Terms and Conditions of the Bonds, we hereby notify as follows:

1. The Board of Directors authorised on 24th May, 1989 to effect a free distribution of shares at the rate of 0.1 share per one share held as of 30th June, 1989 Tokyo Time (the record date).

2. Accordingly, the Conversion Price was adjusted pursuant to Condition 5 (C) of the Terms and Conditions of the Bonds effective as from 1st July, 1989 Tokyo Time.

(1) U.S.\$60,000,000 6 1/4 per cent. Convertible Bonds Due 1995
Conversion Price before adjustment: Yen 582.10
Conversion Price after adjustment: Yen 529.20

(2) U.S.\$450,000,000 7 per cent. Convertible Bonds Due 1997
Conversion Price before adjustment: Yen 581.50
Conversion Price after adjustment: Yen 537.70

4th July, 1989

7-1, Nishi-Shinjuku 2-chome, Shinjuku-ku, Tokyo, Japan.

Notice to the Warrantholders of CANON INC.

U.S.\$300,000,000 3 1/4 per cent. Notes 1992
U.S.\$200,000,000 3 7/8 per cent. Notes 1993
U.S.\$1,000,000,000 4 1/4 per cent. Notes 1993

with warrants to subscribe for shares of common stock of CANON INC.

Pursuant to Condition 11 of the Terms and Conditions of the Warrants, we hereby notify as follows:

1. The Board of Directors authorised on 24th May, 1989 to effect a free distribution of shares at the rate of 0.1 share per one share held as of 30th June, 1989 Tokyo Time (the record date).

2. Accordingly, the Subsidiary Price was adjusted pursuant to Condition 7 of the Terms and Conditions of the Warrants effective as from 1st July, 1989 Tokyo Time.

(1) U.S.\$300,000,000 3 1/4 per cent. Notes 1992
Subscription Price before adjustment: Yen 1,333.00
Subscription Price after adjustment: Yen 1,211.80

(2) U.S.\$200,000,000 3 7/8 per cent. Notes 1993
Subscription Price before adjustment: Yen 1,333.00
Subscription Price after adjustment: Yen 1,211.80

(3) U.S.\$1,000,000,000 4 1/4 per cent. Notes 1993
Subscription Price before adjustment: Yen 1,688.00
Subscription Price after adjustment: Yen 1,368.20

4th July, 1989

7-1, Nishi-Shinjuku 2-chome, Shinjuku-ku, Tokyo, Japan.

Notice to the Bondholders of CANON INC.

U.S.\$100,000,000 3 per cent. Convertible Bonds Due 2000

Pursuant to Condition 12 of the Terms and Conditions of the Bonds, we hereby notify as follows:

1. The Board of Directors authorised on 24th May, 1989 to effect a free distribution of shares at the rate of 0.1 share per one share held as of 30th June, 1989 Tokyo Time (the record date).

2. Accordingly, the Conversion Price was adjusted pursuant to Condition 5 (C) of the Terms and Conditions of the Bonds effective as from 1st July, 1989 Tokyo Time.

Conversion Price before adjustment: Yen 1,301.00
Conversion Price after adjustment: Yen 1,182.70

4th July, 1989

7-1, Nishi-Shinjuku 2-chome, Shinjuku-ku, Tokyo, Japan.

Broad political spectrum in Poland's Parliament

Christopher Bobinski looks at a range of opportunities not seen in Eastern Europe since the war

POLAND'S Parliament, which meets today for the first time since Solidarity's resounding success in last month's elections, may soon be displaying a range of political opportunities never before seen in post-war Eastern Europe.

The deputies in the 460-seat Sejm, the legislative lower chamber, and the 100-seat Senate, who will be taking their oaths and electing speakers, are still for the moment more or less in the ranks assigned to them in pre-election agreements between the Communist authorities and Solidarity.

But already the "official" parties are beginning to fray at the edges. Solidarity deputies are cautiously exploring the possibility of forming separate groupings and both chambers are wondering to what extent they will be able to act independently of their respective party leaderships, which in most cases are outside parliament.

The Communists, with 173 seats, are the largest group in the Sejm but they no longer enjoy an absolute majority as they have done since the war. A fringe of 20 or 30 of their deputies are more than reform-minded, with some not averse to co-operating with Solidarity in pushing for economic and political change.

The group covers a wide political spectrum and their leader is Mr Miroslaw Orzechowski, a member of the present party Politburo and a possible contender for the post of Party First Secretary.

But the group also contains politicians like Mr Tadeusz Fliszczak, the party leader in Gdansk in 1981, who worked well with Solidarity and was sacked at the outset of martial law, and who is now concerned to protect the Communist deputies' freedom to vote according to their conscience rather than party dictat.

Next comes the Peasant Party (ZSL), with 76 seats, which till now has played a more or less subservient role to the Communists. But the group does contain a number of outright Solidarity sympathisers, such as Mr Wladyslaw Zabinski, a farmer from Tarnow who heads Farmers' Solidarity's chapter there.

Whichever way the ZSL deputies choose to evolve, they will certainly tend to form a strong farming lobby with Farmers' Solidarity deputies in the opposition camp. So far the ZSL parliamentary group has, by 35 votes to 33, elected Mr Alexander Bentkowksi, a lawyer from Rzeszow and a Solidarity sympathiser, as their floor leader, against the wishes of the party leadership, which is outside parliament and will in all probability be voted out by an extraordinary congress in a few months or less.

The ZSL, though, will be putting up

Prof Miroslaw Kozakiewicz, a 64-year-old sociologist and the head of Poland's Family Planning Association, for Speaker and he will in all probability be elected, although Communists both on the official side and within Solidarity will vote against him.

After the ZSL comes the Democratic Party (SD), which now has 27 deputies and has in the past played a similarly passive role. Now it has elected as its leader in parliament Prof Jan Janowski, who has represented the party in the past and was one of those who voted against legalising Solidarity in 1982.

Six or eight of the SD deputies are for the moment classified as Solidarity sympathisers, ready should the need arise to vote with the opposition but retaining a loyalty to their party, which looks likely to evolve into a free-market grouping looking for allies among those in the Solidarity team who favour economic liberalisation.

Bringing up the rear in the official camp are three small and separate Catholic groups which in all have 23 seats and are a relic of the days when the Communists needed to have them in Parliament to demonstrate a measure at least of religious tolerance.

Solidarity's 161 deputies will, at least at the start, remain a cohesive group, especially if the Communist

Party leadership adopts a confrontational style in Parliament. At present the group is dominated by veterans of Solidarity like Mr Janusz Korwin who is a social democratic personality and who first went to prison in the mid 1980s thanks to his opposition activities.

He is supported by other Solidarity stalwarts who share a common experience of the movement's rise in 1981 followed by the despatch of interment under martial law. As a whole the group is led by Prof Bronislaw Geremek, a close ally of Lech Walesa. But there are some in the group already showing signs of wanting to stress their religious as well as nationalist convictions and set to vote against Prof Kozakiewicz for his support of birth control.

Bringing up the rear in the official camp are three small and separate Catholic groups which in all have 23 seats and are a relic of the days when the Communists needed to have them in Parliament to demonstrate a measure at least of religious tolerance.

Solidarity's 161 deputies will, at least at the start, remain a cohesive group, especially if the Communist

Party leadership adopts a confrontational style in Parliament. At present the group is dominated by veterans of Solidarity like Mr Janusz Korwin who is a social democratic personality and who first went to prison in the mid 1980s thanks to his opposition activities.

Also in the Sejm are a similar number of supporters of workers' self-management traditions who see themselves on the opposite side of the political spectrum to the liberals.

The senate, which will have the right to veto Sejm legislation, is in a different position, as after the death of Solidarity's Prof Grzegorz Bialkowski last week the opposition controls 58 seats. The other is held by Mr Henryk Stoklosa from Pils, who ran as an independent and whose voting intentions are not yet clear. Farmers are strongly represented in the senate and both the economic left and right are present.

It was also clear at the weekend when the senators met that the chamber is concerned to retain a measure of autonomy from the Solidarity trade union. Only 17 senators voted for Mr Jerzylaw Kaczynski, a senior Solidarity official favoured by Mr Walesa when he stood for a post in the senate presidency. The senate will almost certainly choose Prof Andrzej Stachowicz, an academic lawyer identified with Farmers' Solidarity, as its speaker.

Irish parliament adjourns after inter-party talks break down

By Our Foreign Staff

THE IRISH PARLIAMENT (Dail) was adjourned until Thursday following the breakdown of inter-party talks to form a new government after the inconclusive general election of June 14.

The prospect of another election loomed large and seems inevitable unless at least one of the parties changes its present stance.

The acting prime minister, Mr Ray Burke, Industry and Energy Minister, said: "The Dail should continue to act as a mediator, oppose the adjournment, since he said, the Dail should continue to act to receive progress reports on the inter-party discussion, but the adjournment was carried on a vote."

Labour itself is coming under some pressure from Flaminio Piccoli to support it as a minority government.

The acting prime minister, Mr Charlie Haughey, told the Dail to remember that the "world is watching" the outcome of the constitutional crisis, and many observers feel that if there is no breakthrough by Thursday, Mr Haughey will ask President Patrick Hillery to dissolve parliament and allow fresh elections.

The leader of the Labour Party, Mr Dick Spring, who

offered over the weekend to act as a mediator, opposed the adjournment, since he said, the Dail should continue to act to receive progress reports on the inter-party discussion, but the adjournment was carried on a vote.

Labour itself is coming under some pressure from Flaminio Piccoli to support it as a minority government.

Yesterday, before the Dail met, Mr Haughey received the backing of his parliamentary party for his stance.

The leader of the second largest party, Mr Alan Dukes of Fine Gael, had soundings with all the other parties at the weekend — seeking a "rainbow coalition" which could muster enough votes to have a parliamentary majority. But there seems no prospect of bridging a left-right divide which such a coalition would imply.

Italy's coalition search waits on Bettino Craxi

By John Wyles in Rome

ITALY'S LATEST political vacuum moves into its 46th day today without any clear indication of when a new government might be formed, and in a phase which could be entitled "Waiting for Bettino".

Those who had been expecting the pace to quicken after the European Parliament elections did not take into account just how much the results might change the calculations of Mr Bettino Craxi, the Socialist Party leader.

Mr Craxi pointed out that one reason for the Regnals' popularity was that the party was free from the various financial scandals in which the established political groupings were involved. He claimed that the Munich inquiry, together with the Bavarian-based Republicans, had been burst into the political headlines by threatening to hold the balance of parliament next year.

Mr Neuenschwander pointed out that one reason for the Regnals' popularity was that the party was free from the various financial scandals in which the established political groupings were involved. He claimed that the Munich inquiry, together with the Bavarian-based Republicans, had been burst into the political headlines by threatening to hold the balance of parliament next year.

Mr Neuenschwander pointed out that one reason for the Regnals' popularity was that the party was free from the various financial scandals in which the established political groupings were involved. He claimed that the Munich inquiry, together with the Bavarian-based Republicans, had been burst into the political headlines by threatening to hold the balance of parliament next year.

Mr Neuenschwander pointed out that one reason for the Regnals' popularity was that the party was free from the various financial scandals in which the established political groupings were involved. He claimed that the Munich inquiry, together with the Bavarian-based Republicans, had been burst into the political headlines by threatening to hold the balance of parliament next year.

Mr Neuenschwander pointed out that one reason for the Regnals' popularity was that the party was free from the various financial scandals in which the established political groupings were involved. He claimed that the Munich inquiry, together with the Bavarian-based Republicans, had been burst into the political headlines by threatening to hold the balance of parliament next year.

Mr Neuenschwander pointed out that one reason for the Regnals' popularity was that the party was free from the various financial scandals in which the established political groupings were involved. He claimed that the Munich inquiry, together with the Bavarian-based Republicans, had been burst into the political headlines by threatening to hold the balance of parliament next year.

Mr Neuenschwander pointed out that one reason for the Regnals' popularity was that the party was free from the various financial scandals in which the established political groupings were involved. He claimed that the Munich inquiry, together with the Bavarian-based Republicans, had been burst into the political headlines by threatening to hold the balance of parliament next year.

Mr Neuenschwander pointed out that one reason for the Regnals' popularity was that the party was free from the various financial scandals in which the established political groupings were involved. He claimed that the Munich inquiry, together with the Bavarian-based Republicans, had been burst into the political headlines by threatening to hold the balance of parliament next year.

Mr Neuenschwander pointed out that one reason for the Regnals' popularity was that the party was free from the various financial scandals in which the established political groupings were involved. He claimed that the Munich inquiry, together with the Bavarian-based Republicans, had been burst into the political headlines by threatening to hold the balance of parliament next year.

Mr Neuenschwander pointed out that one reason for the Regnals' popularity was that the party was free from the various financial scandals in which the established political groupings were involved. He claimed that the Munich inquiry, together with the Bavarian-based Republicans, had been burst into the political headlines by threatening to hold the balance of parliament next year.

Mr Neuenschwander pointed out that one reason for the Regnals' popularity was that the party was free from the various financial scandals in which the established political groupings were involved. He claimed that the Munich inquiry, together with the Bavarian-based Republicans, had been burst into the political headlines by threatening to hold the balance of parliament next year.

Mr Neuenschwander pointed out that one reason for the Regnals' popularity was that the party was free from the various financial scandals in which the established political groupings were involved. He claimed that the Munich inquiry, together with the Bavarian-based Republicans,

EUROPEAN NEWS

The long wait for Romania's economic recovery

Leslie Colitt looks at President Nicolae Ceausescu's options and the price the people may have to pay

A LONE Romanian meat-seller barge on the nearly-deserted Danube-Black Sea Canal is a vivid reminder that the waterway inaugurated in 1984 by President Nicolae Ceausescu is a triumph of prestige over commerce.

Tens of billions of lei are now being spent on an even grander vision, a 72-kilometre canal to connect Bucharest with the Danube. Two ports are to be built near the capital with a capacity of 30m tons although it is unclear where the cargo will come from.

After paying the bulk of Romania's foreign debt of \$15bn in 1980, Western banks estimate only \$300m in loans remain. President Ceausescu appears determined to continue remaking the nation in his image.

The price is likely to be more austerity for Romanians. Their hopes for improved living standards rose briefly after the President's recent announcement that the debt was repaid. Shortly afterwards, though, Romania banned all future foreign loans.

The lot of ordinary Romanians could be greatly improved even without Western credits. Collective farm peasants could be encouraged to raise more on their house-



Bread queues illustrate the economic reality

hold plots instead of intimidating them by registering their livestock and forbidding them to sell above the state price.

The inevitable result of this centrally managed agriculture is that customers shuffle aimlessly through the dimly-lit Alimentari Uniqa supermarket in the center of Bucharest in search of some

thing to eat.

They are faced with aisles of canned and bottled tomatoes, beans, rice and noodles. The meat counter offers pig trotters which cannot be sold abroad. The tiny feet strongly suggest the piglets were slaughtered for lack of food.

One price is obvious: a Bucharest taxi driver said, at the rear door of the meat shop at the black market price of 150 lei a kilo. This compared with 40 lei for rationed meat which, however, was unavailable. The statistical office said the average monthly wage last year was 3,125 lei.

Officially, last year's grain harvest was given as 32.6 million tons, a reminder of Romania's pre-war role as the granary of Europe. The actual harvest, however, was estimated by Western agricultural analysts at closer to 20m tons. A lack of fertilisers, inadequate irrigation and the absence of incentives meant that much of

the grain was never produced.

Enormous waste in bringing in the crop was to blame for the missing remainder. This year's grain harvest may turn out even worse because Romania failed to import plant protection chemicals.

Systematisation - the elimination of unviable villages and the creation of agro-industrial centres - could also bring about a worsening of food supplies if it is carried out on a large scale. Highly-productive household plots would be eliminated and peasants would place fur-

ther demands on already strained food supplies.

President Ceausescu has given no sign that costly civil works projects and grandiose industrial schemes will be scaled down. Millions of tons of concrete continue to be poured into the capital's enormous Victory of Socialist Boulevard and other prestige construction sites.

The President has acknowledged the need for modernising badly run-down machinery and equipment using the "latest breakthroughs in science and

technology." But Western commercial officials in Bucharest say the Romanians are eager to "poach" technology from the West without paying for it. President Ceausescu's unrelenting micro-management of industry and agriculture is the overriding feature of the economy. On visits to factories the President instructs managers to make more extensive use of this machine or that. Managers and ministers either do things his way or are sacked for being disloyal. The result is massively distorted output statistics.

Romanian officials speak broadly of four main economic options for the country.

- The building up of hard currency reserves "much as in Japan" one planner remarked.

- High priority to be given to modernisation of obsolescent plants in the light of the President's recent criticisms.

- Importing consumer goods or diverting goods normally exported to the domestic market. This option was not actually put forward by the officials but was acknowledged by them to be a "possibility" in response to Western queries.

- Offering short-term credits to potential Third World buyers of Romanian products in order to stimulate flagging

exports. Western analysts believe hard currency reserves will be slowly built up and some effort made to modernise the industrial base. This, however, is likely to be modest in the light of falling exports and President Ceausescu's prohibition of new loans.

Meanwhile, the ailing economy is weighed down by the misdirected industrial projects of the past which devour resources and investments.

The Cernavoda nuclear energy station being supplied by the Canadians is long delayed by shortcomings on the Romanian side and is not due for completion until 1993, according to Westerners working on the project. Supplies of electricity and heat will remain tenuous at least until then.

Romania's hi-tech aircraft industry, a personal project of the President, failed to find a market for the domestically-produced Romiac, the BAC 1-1 airliner licensed by British Aerospace.

The steel industry is another industrial white elephant, consuming vast quantities of imported iron ore. Petrochemical plants are operating at a fraction of capacity and three out of the four Romanian joint ventures with Western companies have virtually broken down.

Strike threatens Norway's oil exports

By Karen Fossel in Oslo

NORWAY'S 1.5m barrels per day North Sea oil production and 50m cubic metres per day natural gas exports are in danger of being shut down due to an indefinite strike over wages called by helicopter pilots who transport offshore workers to platforms, employed by the Norwegian monopoly Helikopter Services firm.

"We may be forced to shut down (oil and natural gas production) by the end of this week unless the dispute is settled," according to Mr Einar Rissa, a spokesman for Statoil, the Norwegian state oil company.

This would mean a loss of about \$25m per day on oil revenue alone, based on an oil price of \$18 per barrel. An earlier strike which lasted for three days ended on June 2 but

normally work 14-day shifts. Daily average transport is for about 600 workers on 40 flights per day.

Mr Tor Steimann, a spokesman for Norsk Hydro, Norway's second largest oil company, said yesterday a prime concern of his company was that of the safety hazard posed by keeping workers beyond their normal 14-day work shift.

Unless the dispute is resolved before the end of the week the minority Labour Government is expected to decide on compulsory arbitration.

For the second year running Norway has invoked a wage freeze to curb high unit labour costs which has hurt the country's competitiveness.

This spring employers and unions agreed to limit pay rises to four per cent after last year's five per cent limit.

Mickey and the time just fade away

By John Wyles in Rome

THE ENDURING appeal of Walt Disney's Mickey Mouse is being exploited by Mr Eraldo Gardini, the president of Italy's Ferruzzi Group, to popularise what he claims is a major environmental and scientific breakthrough in the production of biodegradable plastic.

Having recently endured an annual meeting of his Milan subsidiary which was prolonged for hours by the closest scrutiny of his environmental credentials, Mr Gardini's last laugh will be to give away 750,000 wristwatches mounted in biodegradable plastic. He is also going to print in "ecological ink" this week's Mickey Mouse cartoon insert which appears in his Roman daily newspaper, *Il Messaggero*.

The new plastic material, "thermoplastic starch," is derived from corn starch and has been developed by Montedison and another Ferruzzi company, Eridania.

The other contents are food products which allegedly strengthen biodegradability and "environmental compatibility."

The wristwatches can be assembled from the parts which will be given away over the next three weeks in each weekly edition of "Topolino" (Mickey Mouse) which is published in Italy by Walt Disney. Even the straps will be made from a natural product, in this case cork.

The ecological ink in *Il Messaggero*'s supplement, meanwhile, will be without lead and made from a soya oil base "as

a further proof of the real possibilities for applying agricultural materials for industrial purposes," said a Ferruzzi statement yesterday.

The company said that the watch coming out this week will not dissolve on the wrist nor suddenly disappear. But once its natural span has elapsed, it can be given a decent burial, and after an attack by natural organisms will disappear within months.

Ferruzzi's ecological strategy to its new product points out that each watch will have extracted half its weight from the atmosphere, because this is what cork absorbs during its growth. As a result, the world is a little less vulnerable to the "green effect" of global overheating. Not just a Mickey Mouse promotion, this.

Co-operation accords await Gorbachev's pen on visit to France

By Ian Davidson in Paris

MR MIKHAIL GORBACHEV starts a three-day state visit to France today, during which Moscow and Paris will cement their political rapprochement by signing a score of bilateral co-operation agreements.

Subjects covered include the production of television sets in the Soviet Union, training business managers, youth exchanges and the establishment of a French cultural centre in Moscow and a Soviet centre in Paris.

The Soviet leader's visit is going ahead despite the death of Mr Andrei Gromyko. His plans to fly to Bucharest for a Warsaw Pact summit on Friday and Saturday are also unchanged.

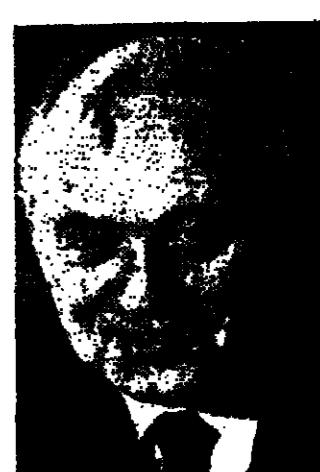
The high point of Mr Gorbachev's French visit is likely to be a speech tomorrow to the Parliamentary Assembly of the Council of Europe in Strasbourg in which Mr Gorbachev is expected to elaborate on his now familiar theme that the Soviet Union and Western Europe both share a "common European home."

As a venue for such a speech, the Council of Europe doubly complements the Soviet leader's campaign to claim common values and civilisation with Western Europe. Not merely is the Council the home of the European Convention of Human Rights and the European Social Charter, its membership also goes considerably wider than the European Community, to include a number of neutral and non-aligned countries like Austria, Switzerland and Finland.

After his speech, Mr Gorbachev will have a brief meeting with Mr Thorvald Stoltenberg, Norway's Foreign Minister, who is the current chairman of the Council's Committee of Ministers.

Mr Roland Dumas, France's Foreign Minister, described bilateral relations as being "set fair." The one important issue on which the two governments seriously disagree is France's insistence that its nuclear deterrent force cannot, in present circumstances, participate in the process of East-West nuclear disarmament.

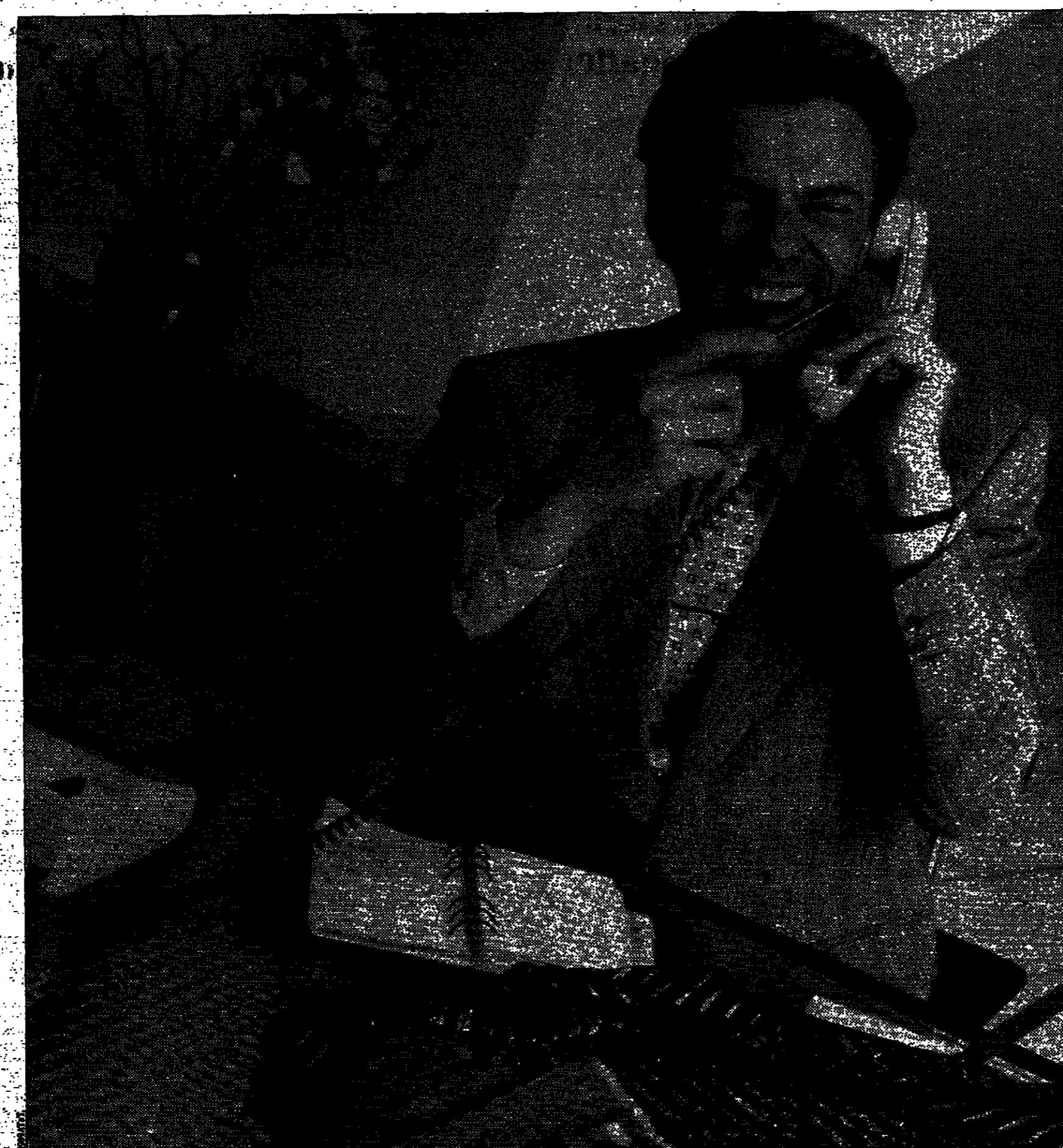
The programme for Mr Gorbachev's visit has a remarkably intimate character. His first



engagement today will be a tête-à-tête lunch with President François Mitterrand, at which the two leaders will be accompanied by their wives, and his last social engagement at dinner tomorrow evening will be a repeat event for the two couples in the even more intimate surroundings of Mr Mitterrand's personal residence on the île Saint-Louis.

The only opportunity for Mr Gorbachev to let loose his natural penchant for public theatre, will be a brief visit this afternoon to the Place de la Bastille, partly as a gesture to the bicentenary of the French Revolution, partly as a pretext to mingle with the crowd.

BUT HE'S SEWING UP A DEAL IN MANHATTAN.



"I've just seen this season's collections."

"Always first with the inside info. So were we right?"

"You always are. You specified all the latest colourways from us."

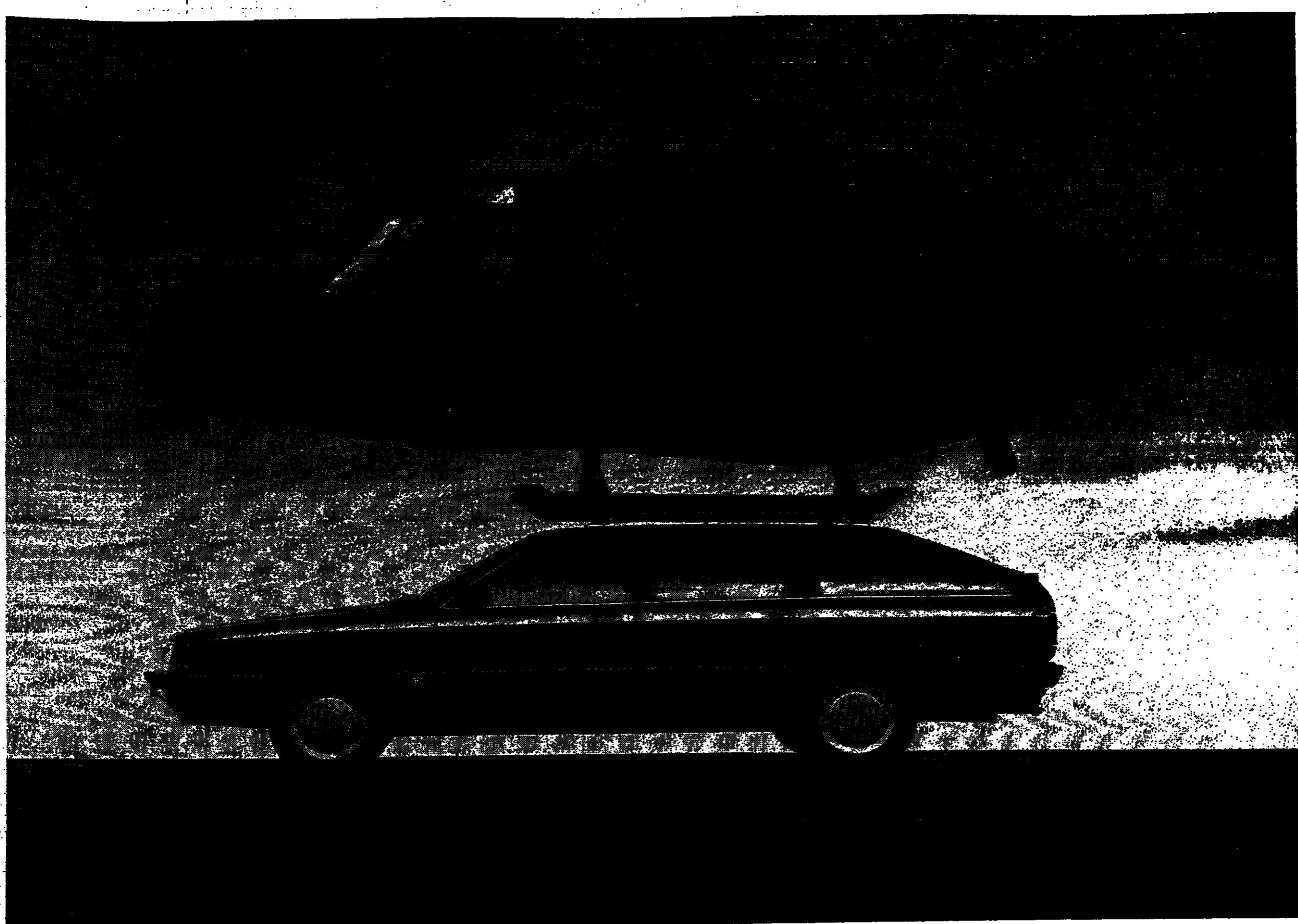
"I guess I oughta order more silk then."

"As I said, Brad, you're always right."

With AT&T, a worldwide leader in telecommunications, and your local telecommunications organisation the lines to the States are open for everyone.

If you want your business to pick up, pick up the phone.





The Audi Avant.
Light enough
to be carried by a
helicopter.
Strong enough to
carry one.

AUDI

THE AUDI AVANT.

Of course, you may never want to carry a 6,000lb Westland Lynx helicopter around on your roof, but that's not really the point.

Our demonstration is simply to prove that safe doesn't necessarily mean big and heavy.

Quite the reverse.

When the engineers at Audi designed the Avant, their brief was high strength with lightweight construction.

All of which sounds simple, but Audi are leaders in the highly complex field of knowing where to take weight out and put strength in.

In the doors, for example, you'll find light alloy frames in place of steel frames.

In the spare wheel well, you'll find that the shell is made from fibreglass reinforced polyester.

In the boot, you'll find that even the jack is made from lightweight aluminium.

These lightweight materials are at least as strong as their big brothers, but they offer a considerable saving in weight.

The result is a lighter car that is quicker to stop and easier to manoeuvre.

You don't have to be built like a tank to be as safe as one.

VORSPRUNG DURCH TECHNIK.

AMERICAN NEWS

Decline in orders points to further US economic slowdown

ECONOMIC activity in the US declined in June for the second consecutive month, according to an industrial survey closely watched by the Federal Reserve in fixing monetary policy and interest rates, writes Peter Riddell, US Editor, in Washington.

The purchasing managers' index dropped last month from 49.7 to 48.8 per cent, the lowest level since July 1986. Previously there had been 33 consecutive months in which the index was above 50 per cent; a reading below that level indicates that the economy generally is

declining.

The index is a composite of replies from purchasing executives in more than 250 industrial companies and covers new orders, production, vendor deliveries, inventories and employment. It thus points to the direction and scope of change of economic activity.

The latest index shows new orders at their lowest level since September 1984, with employment declining for the fifth month running. Moreover, the rate of growth of new export orders slowed significantly last

months, more purchasing executives reported price declines than increases. This covers the cost of goods and materials which they purchase.

Taken with other recent indicators, the latest figures provide further evidence of a marked slowdown in the rate of US economic growth this year. But there is no clear-cut evidence yet to substantiate Wall Street's recent fears of a coming recession.

None the less, the figures will underscore worries in the Bush

administration about slower growth than it wants, which will both complicate any reduction of the federal budget deficit and increase calls for an easing of US monetary policy.

The Fed's policy-making open market committee meets tomorrow and on Thursday to review its previous cautious stance regarding the views of those favouring continued restriction and those who believe some easing is now justified.

Mr Robert Brey, the chairman of the purchasing managers' business survey committee and director of

material management at Pitney Bowes, commented that the index had averaged 51.4 per cent for the first half of this year.

He said: "Past experience indicates that if this average were to continue for the second half of 1989, it would be consistent with real Gross National Product growth of about 2.5 per cent. However, the index average for the second quarter, 50.5 per cent, appears to be more consistent with real GNP growth closer to 2 per cent. The index would have to fall below 44 per cent before signalling

Mr Brey added that in June "the total economy continued down the path toward slower growth as it ended the second quarter. The manufacturing economy declined for the second consecutive month as all indicators, except production, registered declines. The best news is that inflation appears to be slowing at a faster pace than the overall economy."

There was little market reaction as activity was quiet in advance of today's Independence Day public holiday in the US, when banks and exchanges are closed.

Fraud claim in Mexican state elections

By Lucy Conger in Morelia, Mexico

MEXICO'S ruling Institutional Revolutionary Party is claiming victory in tight elections in two key states, but left and right-wing opposition parties claim the voting on Sunday was marred by fraud.

Polls took place peacefully. After the polls closed, however, a war of words began in a flurry of bulletins released by the leading parties, citing irregularities including stolen ballot boxes, keeping opposition poll-watchers away from the polls, and failure to deliver bulletins to polling places.

In Baja California and Michoacan, opposition activists alleged interference with electoral rolls, eliminating pro-opposition voters and adding phantom voters.

In state congressional elections in western Michoacan state, a bastion of the left-wing Party of the Democratic Revolution (PRD), PRI officials published figures claiming a lead of between 10 and 35 per cent in 10 out of 18 deputy seat races.

Mr Cuauhtémoc Cárdenas, the former Michoacan governor and national PRD leader, published preliminary vote counts showing a strong lead for PRD candidates in 10 state congressional districts.

Opposition parties are still hoping to set a precedent with wins in the two states which would wrest a governorship and state congress from the ruling party's control for the first time under the 60-year PRI regime.

By early yesterday, PRI party officials said no results would be released in the race with the right-wing National Action Party (PAN) for the governorship of the northern border state of Baja California until next Sunday.

The PRI declarations of victory show "a concession of victory was made at a high political level some time ago that the opposition would not win," said Mr Jorge Castañeda, a political commentator, after observing the Michoacan elections.

Such a stance would stretch the credibility of the promises of President Carlos Salinas de Gortari to stage clean elections and democratise the PRI.

Guidelines for Brazil's budget

By John Serham in São Paulo

BRAZIL'S Congress has drawn a general outline for the 1990 budget, in one of its final votes before the winter break. Unlike previous votes increasing wages and the federal budget deficit, the latest law imposes greater austerity than even the Finance Ministry had requested. But economists say it contains wide loopholes.

Economists say excessive government spending is the single most important source of Brazil's runaway inflation. In June, prices rose 24.8 per cent, bringing inflation over the past 12 months to 964 per cent. Inflation so far this year has been 176 per cent.

The budget guideline law, as the legislation is known, was approved by a pro-forma vote by the leaders of the two main parties in Congress. The legislature could not convene a quorum to vote on the bill, thus diminishing the law's political clout. Congress can amend the law any time during the coming year.

It establishes a principle that spending cannot exceed revenues, but still allows the government to increase its spending deficit to fund "priority investments" and land reforms and to capitalise the sickly state companies. However, the law does require impressive cuts in government staffing levels, by eliminating some 35,000 posts next year.

The Government must now frame its draft budget for 1990 within the limits imposed by the guideline law. Congress must approve a budget by November, when presidential elections are to be held.

Thatcher link with US waste company scrutinised

John Plender reports on a controversy surrounding a Florida-based unit of Attwoods of the UK

TWO co-directors of Mr Denis Thatcher on the board of a British public company paid money to a US official in a position to influence the award of a contract in its favour. This allegation, which concerns Attwoods, the British waste management group of which the British Prime Minister's husband is deputy chairman, was made in a Channel Four documentary programme broadcast last night.

The charges centre on a Florida-based company, Industrial Waste Service (IWS), which Attwoods took over in 1984.

The US company is also being sued in the US for alleged large-scale pollution.

The programme - A Special Relationship - claims Mr Thatcher and the other Attwoods directors knew IWS was under investigation for anti-trust offences before the takeover. The programme also claims the two directors were involved in business dealings with a Mafia figure in the 1970s.

A Downing Street spokesman said the Prime Minister's office never discussed the affairs of the Prime Minister's husband.

The payments to a public official were made in 1985 when IWS, Attwoods' main subsidiary in the US, was negotiating an exclusive contract with the City of Opa Locka in Greater Miami for the collection of commercial waste.

The two Attwoods main board directors concerned are Mr Jack R. Casagrande and Mr Ralph Velocci, who run the group's US operations. They paid \$10,000 (£5,450) to Mr John Riley, the mayor of Opa Locka, weeks before he chaired a



Denis Thatcher

meeting of the City Commission, which awarded the contract to IWS against the advice of the city manager.

The payments were made to Mr Riley indirectly through a lawyer's trust account.

Asked at what point Mr Thatcher and the Attwoods board became aware of the payments, Mr Cooper said he thought they became aware at the time of the Grand Jury investigation. "The Attwoods board did consider the matter," he said, "but they accepted the version which was given to them both by Jack Casagrande, Ralph Velocci and the [Mr Casagrande's] American attorneys".

The board regarded the payments, said Mr Cooper, as "a minor personal matter, a matter for those two parties". It was not something for the Attwoods board to take further, he suggested, because charges had not been laid.

Mr Casagrande and Mr Velocci came under suspicion in 1985 when the Miami police secretly taped the telephones of Mayor Riley during an investigation of alleged corruption at Opa Locka City Hall.

Telephone conversations between Mr Casagrande and Mayor Riley on November 6 and 7, 1985, three weeks after

IWS had formally applied for the Opa Locka waste contract, led the police to seek permission from the courts to continue their wire taps.

The Channel Four programme revealed bank details of the payments made to the mayor, including cheques and deposit slips bearing the signatures and initials of the two Attwoods directors.

The two Attwoods directors were subpoenaed in April 1986 to appear before a Grand Jury investigating the Opa Locka affair. To date neither has been charged with any offence arising from their activities relating to the contract; nor has Mayor Riley.

The Grand Jury has made no public pronouncement. The Miami police file on the affair remains open.

Asked at what point Mr Thatcher and the Attwoods board became aware of the payments, Mr Cooper said he thought they became aware at the time of the Grand Jury investigation.

"The Attwoods board did consider the matter," he said, "but they accepted the version which was given to them both by Jack Casagrande, Ralph Velocci and the [Mr Casagrande's] American attorneys".

The board regarded the payments, said Mr Cooper, as "a minor personal matter, a matter for those two parties". It was not something for the Attwoods board to take further, he suggested, because charges had not been laid.

Mr Casagrande and Mr Velocci came under suspicion in 1985 when the Miami police secretly taped the telephones of Mayor Riley during an investigation of alleged corruption at Opa Locka City Hall.

Telephone conversations between Mr Casagrande and Mayor Riley on November 6 and 7, 1985, three weeks after

The association of Mr Denis Thatcher's name alongside the controversial American directors of Attwoods has attracted earlier attention on both sides of the Atlantic.

Before sentence was passed on IWS in a Florida anti-trust case in 1986 IWS's lawyer pleaded in his client's favour that IWS's British owners included very prominent people, "perhaps the most prominent being the husband of the British prime minister, Margaret Thatcher." Mr Thatcher is a non-executive deputy chairman, but he is known to be active in promoting Attwoods' interests.

Mr Thatcher, who is also a director of other companies including Pitney Bowes - said in 1988 that he was "completely satisfied" that IWS was above board.

Mr Jack Casagrande has also been embroiled in a protracted legal wrangle in the Florida courts over charges of mail and conspiracy. Yesterday a judge found that while there was sufficient evidence to prosecute Mr Casagrande, there were deficiencies in the filing of the documents setting out the charges. He therefore dismissed the charges. The prosecutor has said the State of Florida will appeal immediately.

At the centre of these legal proceedings is a deal between a New York-based company with which Mr Casagrande has been associated, Urban Waste Disposal, and the local authority at Marion County in Florida.

Urban Waste Disposal claimed to be able to operate a machine which was said to extract high grade fuel oil, gas and solid fuel from waste and which never went into operation. The Florida State Prose



Ralph Velocci, left, and Jack Casagrande

ctor will continue to claim, on appeal, that Mr Casagrande and others defrauded the local authority of profits from the dump site because they promised to deliver the machine knowing from the outset that it would not work.

Court documents assert that Mr Casagrande was a director of Urban Waste Disposal from 1982 to 1987 and a shareholder. Mr Casagrande's lawyers claim that he was registered as a director through a clerical error and resigned in 1987.

Also involved is Mr Rocco Velocci, a director of the Attwoods subsidiary at the time it managed the Ocala landfill site. While charges of theft and conspiracy against

him were dropped yesterday, he still faces two charges of racketeering and conspiracy to racketeer.

Mr Velocci had been involved in marketing the controversial waste-to-energy machine in Florida and in Long Island New York, where he did so in the company of Mr Salvatore Avallone Jr, an identified member of organised crime who represented the interests of the Mafia's Lucchesi family in the Long Island waste industry. Mr Rocco Velocci is a brother of Mr Ralph Velocci who sits on the Attwoods main board.

John Plender presented the Channel Four programme

WORLD TRADE NEWS

Japan ponders new ways to run the shop

Talks with US begin soon on structural blocks to trade, writes Peter Montagnon

THE PRICE of golf balls is a subject of considerable interest in Japan. In Tokyo they cost seven times the retail price in New York.

In drawing attention to this disparity at a recent businessman's lunch in Tokyo, Mr Shigeo Muraoka, vice minister for international affairs at the Ministry of International Trade and Industry (Mit), was doing more than lamenting the high cost of one of Japan's favourites sports.

It was just one example, he said, of big price differentials between Japan and the rest of the world in a wide range of goods and services from electricity to pork chops to taxi fares. Recognition of this has prompted a belief in Japanese government and business that the internal functioning of the country's economy is inefficient and in need of structural reform.

Enter the administration of President George Bush in the US with its proposal for bilateral talks on structural impediments to trade, and it would be easy to assume that the two countries have at last arrived at some common purpose.

Some of the most important western European production centres, including West Germany and the UK, saw output fall and stocks rise in the first quarter. The US and Canadian industries also faced difficulties.

The UK textile industry suffered more than most of its competitors. Spinning production levels fell by 24 per cent, while weaving output declined by 8 per cent. The UK weaving sector was also burdened by higher stocks.

Switzerland was the only other country to record lower production levels in both sectors.

West Germany and Italy experienced a fall in spinning output, while Canada and the US suffered pressure on production in the weaving sector.

The Bush administration's new-found preoccupation with

Japan's economic structures stems from the failure of earlier efforts to redress the trade imbalance with Japan through currency depreciation and the removal of physical barriers to trade.

The fact that the US deficit with Europe has shrunk while that with Japan has not suggests to policy-makers in Washington that the root of the problem must lie elsewhere, in the intangible economic and social structures of the country itself.

In particular, US attention is focused on Japan's retail distribution system, which is thought to deter imports of consumer goods by making it difficult for large retailers which stock foreign goods to open new outlets.

Lack of competition for public works and other contracts in Japan has also come under scrutiny, because business is routinely shared out among individual companies.

In addition, the land taxation system discourages residential building development. This pushes up housing costs, forcing Japanese to save more and consume less.

Conducted outside the framework of the Super 300 complaints under the US Trade Act of last year, the talks, due to begin at the G7 summit in Paris next week, are to be engaged without any explicit threat of sanctions. The hope is that they will achieve something that US officials privately acknowledge the Super 300 complaint will not - real

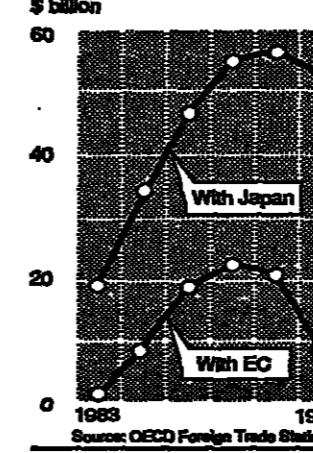
However, Japan retains an abiding suspicion of the US objectives in such talks. The fear in Mit is that they risk being one-sided, based on misconceptions, and could backfire, heightening trade tensions because of unrealistic expectations in Washington of what they can achieve.

The spinning sectors of Italy, Japan and South Korea saw stocks increase. The level of weaving stocks rose in South Korea, Pakistan and the US.

As an international industry, world textiles tends to see its pattern of trade influenced by exchange rate movements. The South Korean and Taiwanese industries benefited from the weakness of the US dollar - to which their currencies are related - by boosting output in spinning and weaving during the first quarter.

The dollar has since strengthened. This may affect the flow of the textile trade by making the Western European industries slightly more competitive against their Asian competitors. But it tends to take several months before changes in exchange rates affect the pattern of the world textile trade.

US trade deficits



been greeted with some dismay. It is a reminder of an economic dependency regarded as no longer sustainable.

The post-war emphasis on production must go, says one senior trade official. To achieve this, consumption must be encouraged and the distribution system reformed.

Mit has already moved to announce a change in the application of the retail law which will make it harder for Japan's 1.6m small shopkeepers to block the establishment of large stores. But the law itself is not to be changed and some experts, such as Mr Makoto Kuroda, until last year a top Japanese trade negotiator, doubt whether such a change will make much difference to US exports.

Only 10 per cent of US exports to Japan are consumer goods. Some US companies, such as Coca-Cola and Schick, which controls 70 per cent of the razor market, have successfully established a presence even under the present system.

Some Japanese economists, such as Mr Noya Takebe of the Industrial Bank of Japan, believe the US is wrong to associate Japan's high savings rate so closely with its high land prices. The cost of housing has prompted a wave of "desperate consumption" spending by young people who can no longer afford

السوق من قبل

ALTHOUGH
WE DEAL
ON 24
STOCK EXCHANGES,
TO US
THERE IS ONLY
ONE MARKET™

DAVID BAND,
CHIEF EXECUTIVE,
ON
THE GLOBAL EQUITIES MARKET



A few years ago we talked of multi-national companies with reverential awe.

It seemed then that only the very largest organisations could genuinely transcend national borders.

Today, however, even relatively small companies are expanding around Europe in readiness for 1992. While the number of European companies investing in North America has mushroomed to unprecedented levels.

Just as these businesses are expanding out of the narrow confines of their home market, so too must the investment world.

It is no longer sufficient for investment banks to offer issuer or investor clients advice purely on their domestic capital market.

These days, after all, investors are focusing more and more on global sector trends. Not just at an individual country's investment potential.

That's why, at BZW, we have one of the world's largest teams of economic, fixed income and equity analysts.

They provide the cross-border intelligence on 21 countries and 2000 companies which backs up our ability to value and place securities, and support an after market in those securities, throughout the world.

Whether it's bonds, swaps, other hybrid instruments or equities, we can now produce the right international investment package for any client, anywhere in the world.

Indeed, we now have the resources to help industry and business treat the world as one market.

Just as we treat it as one investment market.

To find out how David Band's view of the investment market could help your business, send your business card to him at the address below. Or telephone us in London on 623-2102.



BARCLAYS de ZOETE WEDD

THE INVESTMENT BANKING ARM OF THE BARCLAYS GROUP
Barclays de Zoete Wedd, Ebbgate House, 2 Swan Lane, London EC4R 5TS.

UK NEWS

Labour warns on alignment plan

Tory move 'will jeopardise MEP co-operation'

By Tim Dickson in Brussels

THE leader of the British Labour Party's 45 newly elected Euro-MPs warned yesterday that co-operation between the Socialist and Christian Democrat groups in the new European Parliament will be "seriously threatened" if the latter grouping accepts the "ragged rump" of British Conservatives into its ranks.

Mr Glyn Ford, on his first visit to Brussels since his party's successful performance in the European elections, was commending on last week's decision by the 32 surviving British Euro-Tories to attempt to align themselves with the Christian Democrats, or EPP, the second largest of the key cross-border political groups in the Strasbourg assembly.

His remarks are significant given the previously close co-operation between the Socialists and the EPP, notably in securing the 260-vote majority in the Parliament needed to influence certain EC legislation.

Mr Ford claimed that the Tories were "routed" during the June 15 elections and that they faced "further humiliation" as they scavenge around for an identity in the European Parliament.

He added: "They have been deserted by their former Spanish colleagues, but now they seek a marriage of cash and convenience with the Christian

Democrats to whom those Spaniards fled," referring to the earlier defection of the Spanish Conservatives from the European Democratic Group.

Mr Ford, whose Labour Party members will now be the largest national bloc in the 160-strong Socialist Group, said that he hoped the Conservative's advances would "quickly be spurned." He added that he has written to the EPP Group to express his concern.

He reminded the EPP that it could not necessarily count on Socialist support for the widely touted plan to share the presidency of the Parliament between the two groups over the next five years.

Mr Ford said that the British Labour group would use its strength in the new Parliament to open "an important second front on Thatcherism."

Labour, meanwhile, would be giving a "strong push" to environmental issues.

• Labour is to support moves by Australia and France to declare Antarctica a nature reserve.

The issue, discussed last month by Mr Neil Kinnock, Labour leader, and Mr Bob Hawke, Australia's Prime Minister, will be raised at a meeting in Paris in October of the Antarctic Treaty consultative parties.

Yamazaki charged over local content rule

By Nick Garnett

YAMAZAKI, the world's biggest machine tool maker, has failed to meet agreed criteria on local content and technology in its UK production plant, according to a confidential report by the European machine tool makers' association, Cecimo.

Following a visit to the Worcester plant by Cecimo members in April, the association is asking EC officials to monitor and control more closely the European content of machines Yamazaki produces in the UK.

Yamazaki said many figures in the report were incorrect and that the Cecimo members had misunderstood what they

had been told during their visit. Local content was between 60 and 70 per cent, the company said.

Yamazaki built the Worcester facility with the help of 55.2m of grants, including one related to the introduction of what is called a flexible manufacturing system (FMS).

The plant began production two years ago. Its production build-up is behind schedule, but Yamazaki says it is making about 65 machines a month and aims to raise production to 75 by the autumn.

The Cecimo report says it does not believe local content is more than 50 per cent. It also says that turnover per worker

is about £118,000, compared with £70,000 for a comparable European plant.

Cecimo says the profit should be very high, but the company's accounts do not show this - Yamazaki's UK operations have so far declared a loss.

Mr Less Pratt, Yamazaki's marketing manager in the UK, said the electronics and drives were brought in from Japan, as they are for many British machine tools.

Hydraulics and castings, however, were mainly sourced in the UK. Cecimo was wrong in believing hydraulic equipment came from Japan and castings from South Korea.

Yamazaki had used different timescales for figures on turnover, employment and for machine sales, Mr Pratt said. It was also understandable that an operation made a loss during its start-up.

Part of the FMS grant was conditional on Yamazaki providing opportunities for technology transfer. The Cecimo report says there is nothing new in the company's FMS.

Mr Pratt said the Worcester plant's tool management and flexible production in sheet metal were new to the UK and the company had welcomed many visitors from the machine tool industry to inspect it.

Advertising market to hit \$13.5bn

By Raymond Snoddy

ADVERTISING expenditure in the UK will total \$14.5bn this year, although the rate of increase is gradually slowing down because of the effects of the consumer and industry of high interest rates and exchange rate policy.

The estimates come in a forecast of worldwide advertising expenditure by Saatchi & Saatchi, the advertising group.

Last year, advertising expenditure in Britain grew by 17.3 per cent to \$12bn, a year in which company profits grew by 18 per cent.

Spending on newspapers in the UK this year should total \$5.7bn compared with \$2.67bn for magazines and \$4.2bn for television.

Saatchi believes that the advertising industry will continue to be relatively recession proof and that companies will

continue to support brands despite difficult economic circumstances; however, the agency expects the rate of growth to drop to 8.4 per cent in 1990 and 7.5 per cent in 1991.

Spending worldwide on the five major media - print, television, radio, cinema and outdoor - totalled \$17.6bn last year, an increase of 10.8 per cent. Growth of 8.7 per cent is forecast for this year, a rise of 4 per cent in real terms.

Uncertainty over the US economy, according to Saatchi, is continuing to affect the US advertising market.

Last year, growth in advertising expenditure - the first time that had happened since 1975.

Total spending in major media totalled \$75.8bn with

\$90.4bn forecast for this year.

Saatchi believes spending on the US television networks will rise by only 3 per cent as cable and local television stations continue to eat into network markets.

Spain remains the fastest growing European advertising market in real terms and is expected to advance at more than 20 per cent a year in constant prices to 1991. It is expected to take one of the top five world advertising markets slots now held by the US, Japan, UK, West Germany and France.

The data in the Saatchi forecast is expressed in US dollars at the average rate for 1988.

* Advertising Expenditure Forecasts, Saatchi & Saatchi Group, Berkeley Square, London W1X 5DH, £100.

Australian groups agree lignite deal

By Our Belfast Correspondent

TWO Australian groups have reached agreement to continue exploration of a major Northern Ireland lignite deposit which could fuel the province's next power station.

Meekatharra Minerals, the Sydney-based minerals company, has signed a joint venture agreement with BHP-Utah, a unit of Australia's Broken Hill Proprietary Company, to continue investigations near the town of Ballymoney in County Antrim.

Under the terms of the agreement BHP-Utah will hold 50.1 per cent of the equity in the project and will assume responsibility for project development, construction and operation.

Meekatharra will hold the remaining 49.9 per cent and will be reimbursed £1.25m by BHP-Utah in respect of past development expenditures. Meekatharra will also fund the next £2m of continuing project costs.

Meekatharra made a strong case last year that it could provide the cheapest electricity in Europe by developing a mine mouth station at Ballymoney.

It is thought that lignite will eventually have to be exploited to meet Northern Ireland's growing demand for electricity.

Facsimile machine market slows after four boom years

By Terry Dodsworth, Industrial Editor

SUCH profitability, however, has brought a rash of new companies into the industry. The number of suppliers has increased from about six just three years ago to 26, with several retailers and service companies such as British Telecom also selling products made for them by Japanese producers.

Manufacturers believe that this year's slower growth is due to a variety of factors. Sales last year were artificially boosted by the postal strike in autumn, which led to a big surge in the market.

At the same time, suppliers say smaller business customers are showing increasing caution over new capital investment at present because of the rise in interest rates. The industry has also lacked any important new technological gimmick to stimulate interest.

Nevertheless, producers believe that the fax industry will continue to be a big growth sector over the next few years. About 75 per cent of sales last year were to new users, and it is estimated that only about 15 per cent of Britain's 1.4m small businesses have a machine.

ICI ethylene plans may raise overcapacity fears

By Peter Marsh

IMPERIAL Chemical Industries, Britain's biggest chemicals group, is considering a big expansion in ethylene in a move which may raise fears of overcapacity in the material in the 1990s.

Mr Ralph Hodge, deputy chief executive of ICI's chemicals and polymers group, said the company was examining the possibility of reopening an ethylene plant at its large chemicals complex in north east England.

Capacity would be about 450,000 tonnes a year of ethylene, which is used in plastics and industrial chemicals. That

would add to ICI's existing production of 600,000 tonnes a year of ethylene at Teesside, some third of UK output.

Mr Hodge, speaking at a petrochemicals conference, said the cost of restarting the plant, at about £150m, would be roughly half that of a new unit.

The announcement may fuel fears that European chemical industry is preparing for overcapacity investments in output of chemicals in the early 1990s.

Several big European producers of ethylenes have said recently they are considering increasing production.

Conference report, Page 2

FROM JULY 1ST-AUGUST 31ST, THE LITTLE EXTRAS ARE IN YOUR ROOM. (NOT ON YOUR BILL).

If you stay at the 5 star May Fair hotel in London during July and August, you'll find a number of pleasant surprises.

Like a full traditional English breakfast - for one or two people - included in the price.

A special welcoming gift delivered from Harrods, full use of all the May Fair facilities as well as free theatre tickets if you stay for three nights or more.

And the final surprise is the price. Just £75 per person per night for two people staying in a double room, including service and tax.

Stay at the May Fair this Summer. You get more than you'd imagine, for less than you thought.

THE MAY FAIR



INTER-CONTINENTAL HOTELS

It's where you go when you've arrived.

Call for reservations 01-629 7777

Notice to the holders of

WARRANTS

to subscribe for shares of common stock of

Nippon Oil & Fats Co., Ltd.

issued in conjunction with

U.S.\$70,000,000 1 3/8 per cent. Guaranteed Notes 1992

Notice is hereby given that as a result of the issuance by Nippon Oil & Fats Co., Ltd. of its U.S.\$150,000,000 4 1/8 per cent. Guaranteed Notes 1993 with Warrants to subscribe for shares of common stock of Nippon Oil & Fats Co., Ltd. on 22nd June, 1989 (London time) with an initial subscription price of Yen 1,148 per share, the subscription price for the above-captioned Warrants was adjusted as follows:

1. Subscription price before adjustment: Yen 1,347.60
2. Subscription price after adjustment: Yen 1,344.90

Such adjustment became effective as from 23rd June, 1989 (Japan time).

Nippon Oil & Fats Co., Ltd.

10-1, Yuraku-cho 1-chome, Chiyoda-ku, Tokyo 100, Japan

OUT ON HIS OWN.
WITHOUT A VODAFONE

OUT OF TOUCH.
WITHOUT A VODAFONE

OUT OF SIGHT.
WITHOUT A VODAFONE

OUT OF HEARING.
WITHOUT A VODAFONE

OUT OF REACH.
WITHOUT A VODAFONE

OUT IN THE COLD.
WITHOUT A VODAFONE

OUT OF BUSINESS?

BE IN WHEN YOU'RE OUT. VODAFONE.

For further information about Vodafone and for details of suppliers, phone 0836 200314.

10-1, Yuraku-cho 1-chome, Chiyoda-ku, Tokyo 100, Japan

Business faces severe graduate shortage

By David Thomas, Education Correspondent

DEMAND for new graduates is so intense this year that two-thirds of employers are experiencing recruitment difficulties, graduate employers reported yesterday.

In consequence, the average starting salary for a 21-year-old graduate with a second-class honours degree is expected to be £10,250 this summer - 10.2 per cent up on last year.

At the end of the recruitment season, 7.5 per cent of graduate vacancies will probably remain unfilled, a higher shortfall than last year.

Openings in manufacturing, production, computing, finance and accountancy are most likely to stay vacant.

The Association of Graduate Recruiters, representing more than 500 graduate employers, released these comments on this year's graduate recruitment round yesterday.

"It's getting steadily tighter and each year it appears to get worse. The students know it's a seller's market," said Mr Smart Rochester, the association's secretary and a partner in chartered accountants Nevill Russell.

The association, together with the Association of Graduate Careers Advisory Services, representing third-level careers officers, is predicting graduate recruitment difficulties for even the best-known companies in the next few years as the number of young people declines.

There are signs too that the programme to complete the internal European market in 1992 is beginning to affect both employers and job hunters.

More UK companies are trying to recruit graduates from continental Europe, but some employers believe the UK will see a net outflow of new graduates to the Continent.

Definitive figures on last year's graduate recruitment round were also published yesterday.

These show a continuing drop in unemployment among new graduates and a growing tendency for students to delay job hunting by taking a year off after college or by waiting until the summer to seek employment.

A new development in 1988 was a slight drop in the proportion of graduates choosing careers in finance, especially banking and insurance, with the manufacturing industry showing some gain.

Mr Rochester said this reflected the financial sector's adverse publicity following the shake out in the City of London after financial deregulation and the stock market crash.

Careers officers reported that employers have this year been considering a broader range of candidates than in the past.

They are reviewing recruitment methods, graduate pay levels, and training and career development opportunities.

They are offering more vacation courses, open days and work experience in a bid to attract final year students.

* First Destinations of Undergraduate, Polytechnic and Institutes of Higher Education Graduates of 1988. Central Services Unit, Crossford House, Precinct Centre, Manchester M13 9EP. Three sets for £5.

BMA attacks plan to penalise doctors

By Alan Pike

THE GOVERNMENT was yesterday accused of hypocrisy and cynicism over its attempts to impose financial penalties on family doctors who fail to meet preventive medicine targets.

Dr John Marks, chairman of the British Medical Association's council, said at the opening of the association's conference in Swansea, south Wales, that the diseases to which the targets would apply - cervical cancer and childhood infections such as mumps, measles and whooping cough - were important but in a different league of killers from alcohol and tobacco.

Yet there did not appear to be any strong move towards introducing random breath testing, while the failure of the Government to increase taxation on alcohol and tobacco was nothing short of disgraceful.

"Tobacco kills 10,000 people a year in this country, but a year in the tobacco lobby is not as politically rewarding to government as doctor-bashing," Dr Marks said.

Retail sales revised higher as credit continues to rise

By Ralph Atkins, Economics Staff

SIGNS that British consumers may have shrugged off high interest rates came in official figures yesterday showing a record increase in credit and an upward revision to retail sales.

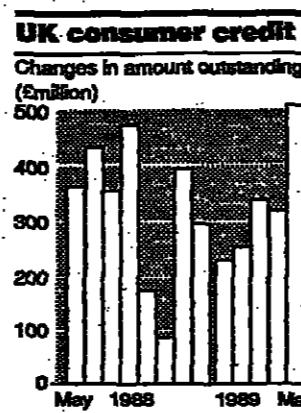
Consumer spending returned to an upward path after remaining flat since last summer, the Department of Trade and Industry figures indicate. Demand for credit also continued to grow despite the steep increase in base rates.

Outstanding consumer credit increased by £505m in May after adjustment for normal seasonal variations. That compared with an average of £300m in the previous three months.

At the same time, retail sales volumes jumped 2.0 per cent - the largest monthly increase for more than two years. Earlier estimates had shown a rise of 2.5 per cent.

The figures suggest consumer confidence remains buoyant, reflecting high earnings, a sensible use of savings and rapid growth in employment. Households may also have readjusted spending behaviour as the full effect of higher mortgage rates has worked through.

However, the retail sales figures continue to point to a



productive potential and the kind of growth rates we are seeing in other countries. The consumer ain't dead yet."

The Treasury warned that retail sales figures were often erratic, while May's figures could have been distorted by unusually mild weather. It said other indicators such as consumer goods imports and the housing market continued to show a slowdown in the consumer sector.

The credit figures include lending on bank credit cards and by finance houses, building societies, retailers and other specialists credit providers. They show a jump of £138m in the amount outstanding on bank credit cards during May - compared with £13m in April.

There was also a rebound in lending by retailers, after net repayments in April. Total outstanding consumer credit agreements stood at £28.38bn at the end of May.

New credit advanced, before accounting for repayments, rose by £4.15bn in May, compared with £3.57bn in April.

The DTI's seasonally-adjusted index of retail sales volumes stood at 124.5 (1985 = 100) in May compared with 123.9 in April.

marked slowdown since last year. In the three months to May, sales were 4 per cent higher than the corresponding period a year earlier - down from peaks of 7 per cent last summer.

Further strong consumer spending growth would intensify fears of high interest rates. Mr Nigel Lawson, the Chancellor of the Exchequer, increased rates largely because of the undesirable side-effects of fast economic growth on inflation and imports.

Mr Bill Martin, chief UK economist at Dresdner Phillips & Drew, said: "Domestic demand is growing faster than the UK's

UK NEWS

Railway unions reject 'talks about talks'

By Fiona Thompson and John Gapper

BRITISH Rail abandoned its planned peace talks for today after the three biggest rail unions refused the corporation's invitation for informal "talks about talks" on the rail dispute.

With a third national 24-hour rail strike set to proceed tomorrow, along with a strike by London Underground workers, Mr Paul Channon, the Transport Secretary, said yesterday that Hyde Park and Regent's Park would be opened to create 7,000 free parking spaces.

The National Union of Railwaysmen, the Aslef drivers' union and the clerical TSSA

union turned down BR's invitation to discuss collective bargaining. The unions want to meet under the auspices of Acas, the conciliation service, to discuss changes to both bargaining machinery and pay, the two issues at the heart of the dispute.

Aslef leaders also confirmed yesterday that its drivers on London Underground will strike tomorrow and ordered a further two 24-hour Tube strikes for Wednesday July 12 and Tuesday July 13.

Aslef's choice of a Tuesday for its Underground strike will leave London commuters fac-

ing travel disruption for two successive days as the NUR has voted to strike on Wednesday July 19, in addition to tomorrow and next Wednesday.

London's 18,000 bus workers are also set to strike tomorrow over their pay claim. This will be their third day of action over a pay offer of 8.3 per cent made by London Buses.

Engineers in British Rail's workshops yesterday voted to join the rail strikes. A postal ballot among 2,500 Amalgamated Engineering Union members produced a large majority in favour of industrial action

over the twin issues.

The NUR conference at Newcastle voted unanimously to reject British Rail's invitation for talks on changes to national bargaining machinery, dismissing it as "a meaningless stunt".

Mr Knapp said the union was not prepared to separate the issues of pay and bargaining arrangements.

"I do not think we should waste our time going to meetings to talk about talks," he said. "The issues are there. Let's get all our cards out on the table. Let's get down to it."

Trident spending forecast to reach £1bn in 1990

SPENDING on Britain's Trident submarine programme is expected to rise to

an annual peak of £1.02bn in 1990-91, the House of Commons defence committee said in a report yesterday. The rate of expenditure will then decline gradually, writes Lynton McJannet.

The committee criticised the Ministry of Defence for having to bear additional costs in the region of several millions of pounds, because of "a strike or a sub-contractor".

By the end of last year, nearly a quarter of the total budget for Trident, just over £25m, had been spent, with 44 per cent of the expenditure committed by December 1988.

Merger to create biggest UK circuit board maker

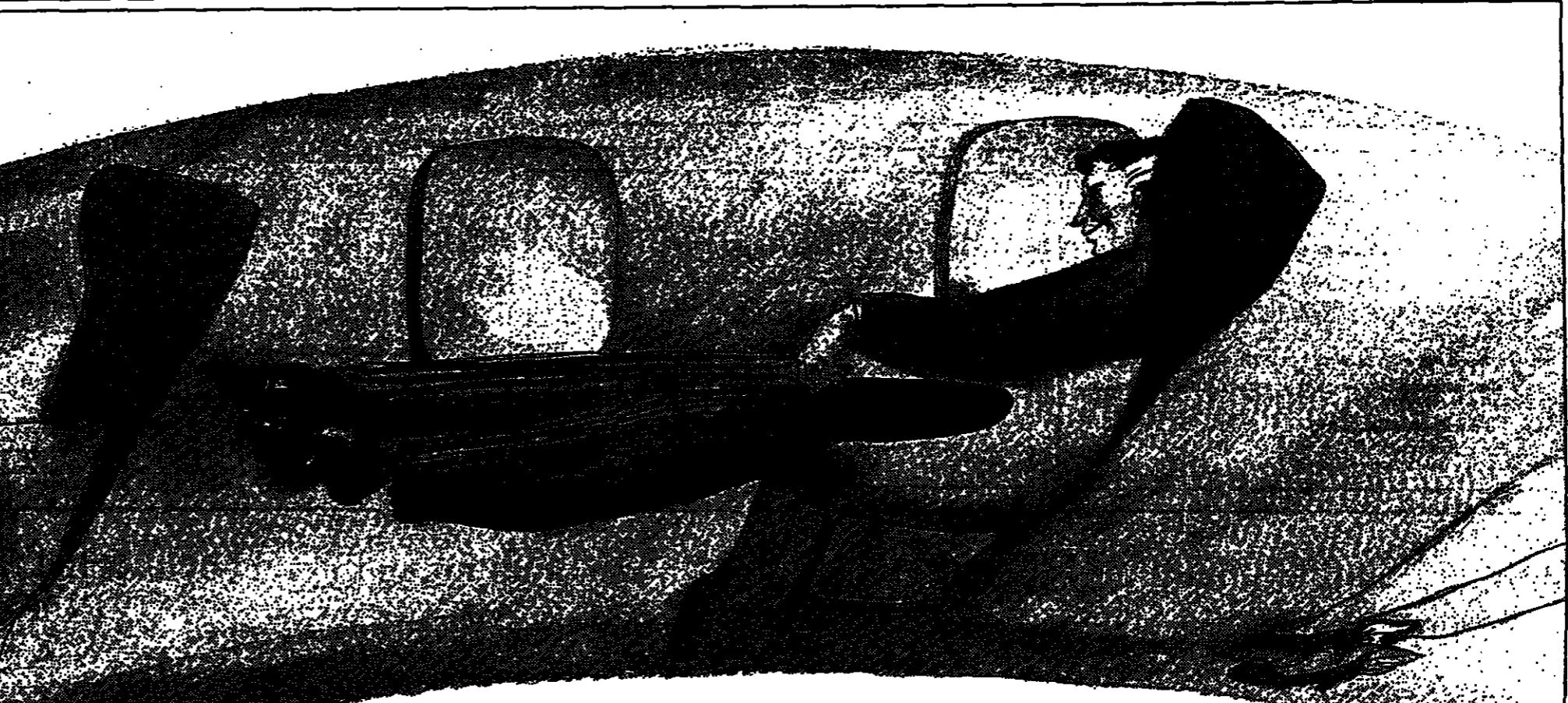
EXACTA, an unquoted maker of printed circuit boards, has agreed to take over Bepi, another Scottish printed circuit board maker, in a £52m deal with Cambridge Electronic Industries, Bepi's sole shareholder, writes James McJannet.

The transaction will create what is in terms of turnover the UK's largest maker of printed circuit boards (PCBs), which are an important component of electronics products.

Under the agreement, which should be finalised in the next few days, Exacta is paying £3.15m in cash for Bepi and issuing 150,000 shares in Exacta to Cei. That will give Cei 20 per cent of Exacta.

Mr Derek Bumpstead, managing director of Exacta, said that the deal was an amicable one, and a logical development for the two neighbouring companies, which have complementary areas of operation.

Exacta, based at Selkirk, had 1988 sales of £24.4m on which it made a pre-tax profit of £1.85m. Bepi, based at Galashiels, had sales of £12.6m in 1988 and made a pre-tax profit of £748,000.



Wardair Business Class. The longest way to Canada.

Fly Wardair and you'll notice a considerable difference.

We've now increased the distance between our seats by almost 25% on our new A310 aircraft. Giving you a 47" pitch, which means more legroom than any other airline flying to Canada.

What's more, our seating plan gives everyone the choice of stretching out on either an aisle or window seat.

It wasn't just the space we looked at. We took a long look at the seats, then changed them.

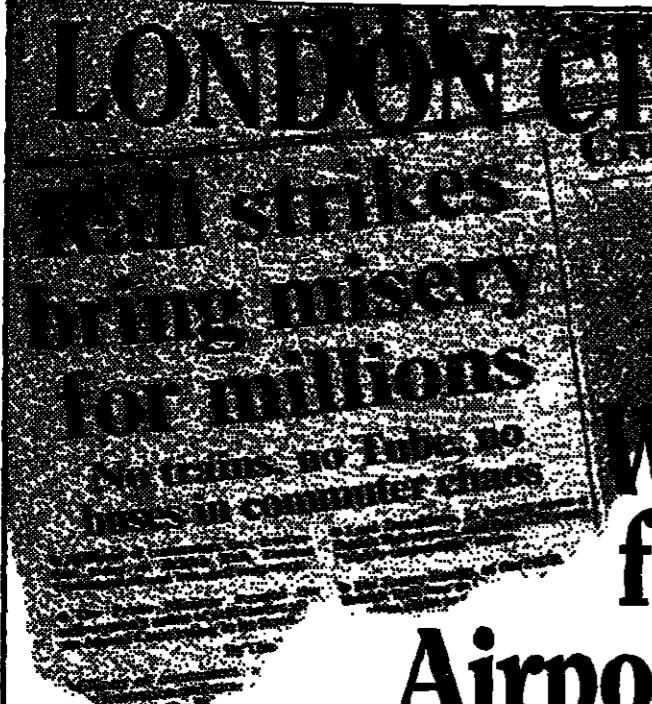
Seats with adjustable legrests and footrests have now been fitted on flights from the UK, Paris & Amsterdam. So when you're up in the air, you can do likewise with your feet. (What better way to enjoy our award winning in-flight service.)

Decide to fly Wardair and we'll make you feel you're on the shortest journey to Canada.

For reservations contact your local travel agent or telephone

Wardair on 0800 234 444.

Wardair Canada
Another Good Decision



LONDON CITY AIRWAYS

The Most Convenient Way to Europe from the Only Airport in London!

WHEN THE OTHER 'LONDON' AIRPORTS ARE CUT OFF BY RAIL OR TUBE DISPUTES, LONDON CITY IS STILL EASILY APPROACHED BY CAR, TAXI OR, BEST OF ALL, BY RIVERBUS. CITY AIRPORT IS ONLY 6 MILES FROM THE HEART OF LONDON - SO YOU WILL SEE WHY WE ARE 'LONDON'S BUSINESS AIRLINE'

- 6 DAILY FLIGHTS TO PARIS**
- 4 DAILY FLIGHTS TO BRUSSELS & AMSTERDAM**
- 10 MINUTE CHECK-IN GUARANTEED - ALL FLIGHTS**



FOR RESERVATIONS - SEE YOUR TRAVEL AGENT OR RING

01-511 4200

NOMURA ASIA EUROPE FUND
SICAV
2, boulevard Royal, L-2953 LUXEMBOURG
R.C. Luxembourg B-26746

Dividend Announcement

The general meeting of shareholders held in Luxembourg on July 3, 1989 has decided to pay a dividend of 0.15 SUS per share on July 11, 1989 to shareholders registered at the close of business on July 3, 1989.

Shares will be traded ex-dividend on July 4, 1989.

The dividend is payable to holders of bearer shares against presentation of coupon no. 1 to the following bank:

Banque Internationale à Luxembourg
2, boulevard Royal
L-2953 LUXEMBOURG
Grand-Duchy of Luxembourg

The Board of Directors

ZIMBABWE

The Financial Times proposes to publish this survey on:

8 AUGUST 1989

For a full editorial synopsis and advertisement details, please contact:

SARAH PAKENHAM WALSH
on 01-873 3000

or write to her at:

Number One
Southwark Bridge
London
SE1 9HL

FINANCIAL TIMES
EUROPE'S BUSINESS NEWSPAPER

**NET
MANUFACTURING
OUTPUT
PER HEAD**

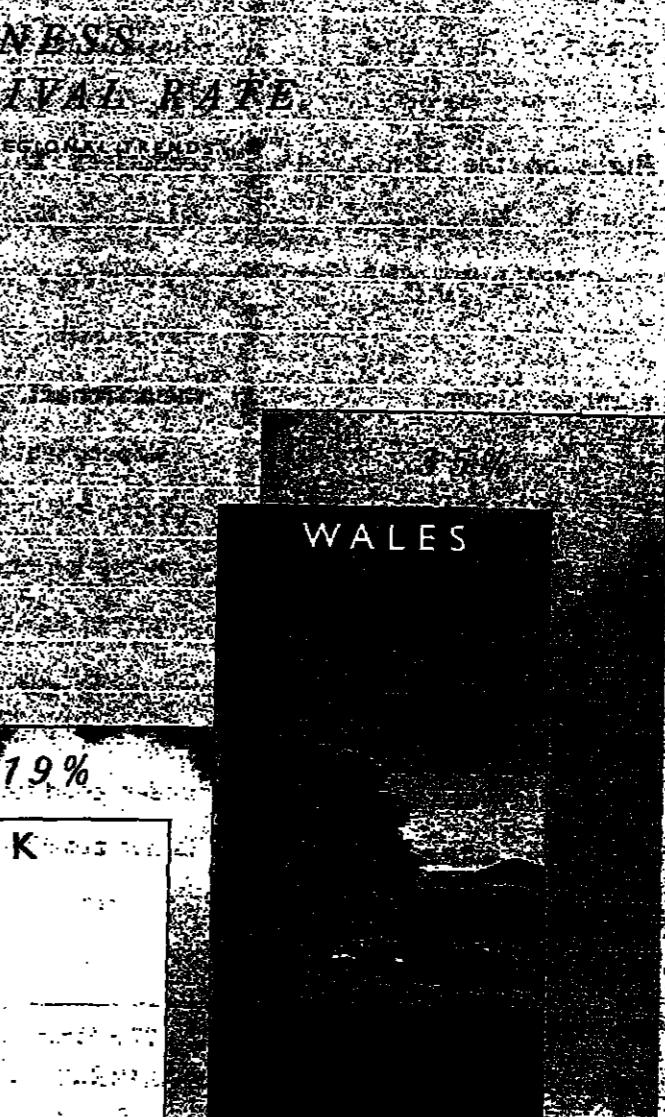
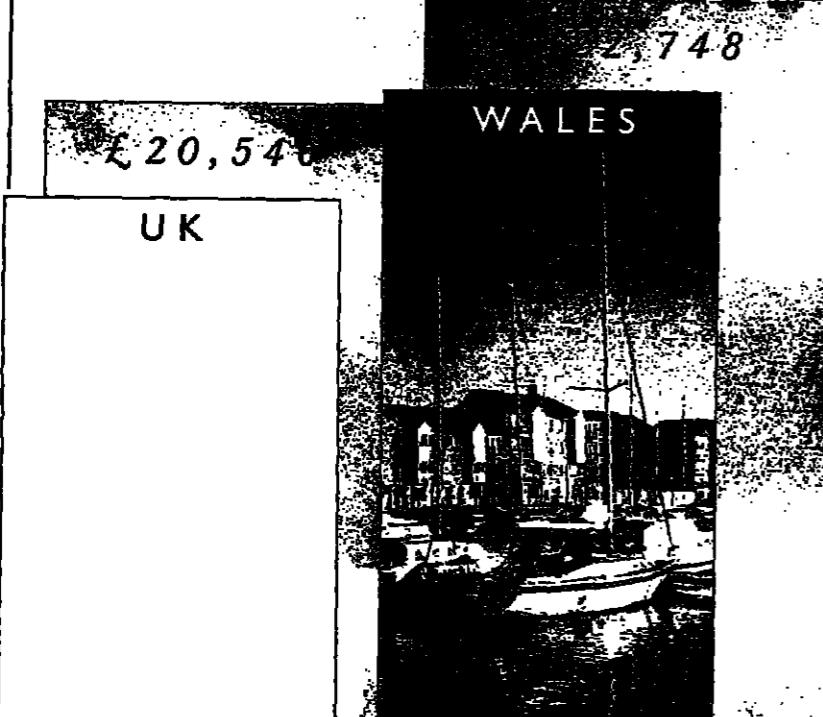
SOURCE: BUSINESS MONITOR PA1002 (1988)

**RATE OF
GROWTH IN
NEW
COMPANIES
REGISTERED**

SOURCE: JORDANS

**BUSINESS
SURVIVAL RATE**

SOURCE: PERIODICAL INDEX



TAKE A PEEK BEHIND THE SCENES.

Change your view of Wales. Take a closer look at the economic scene and compare it with the UK as a whole.

Take for example, the growth rate of new business formations, and equally as crucial, their survival rate. Then take another key area, productivity of manufacturing industry. Together they are major factors in creating economic growth.

In these and an increasing number of other

important indicators, it may surprise you to see Wales beginning to overtake the rest of the UK.

But if it comes as something of a surprise, it is no coincidence. The WDA's strategy is to stimulate self-generated economic activity resulting in growing levels of indigenous and inward investment.

This in turn is creating a land of great potential that has already been recognised by

blue chip companies such as Ford, Matsushita, NPI, Bosch and Sony.

But a growth area also needs the professional and service infrastructure to support corporate development. Which is why the WDA strategy also focuses on creating commercial as well as industrial expansion. And why major players like Touche Ross and Debenham Tewson rate Wales as a key growth area. And why Rothschild have arrived.

If this all sounds like the place where you are most likely to succeed, it is.

So if your company is expanding its horizons, talk to the people behind the scene.

Contact Anna Prokic on (0222) 222666, or write to: The Welsh Development Agency, Pearl House, Greville Rd, Cardiff CF1 3XX.

WDA

WE MEAN BUSINESS IN WALES

*Percentage change first eight months of 1988 on first eight months 1987. Calculated from VAT Registrations and Deregistrations. Stock at end of 1979 less deregistrations 1980-84, expressed as a percentage of the total at end of 1979.

FT LAW REPORTS

Pension is not deductible from redundancy money

ROYAL ORDNANCE PLC v PILKINGTON

Court of Appeal (Lord Justice Bingham and Lord Justice Mann); June 28 1989

AN EMPLOYEE'S right to set off an employee's pension against his redundancy pay arises only if the pension is to be paid when he leaves his employment, or within 90 weeks after he has left. And accordingly, on a transfer of employment from one undertaking to another, pension earned with the transferred and paid after transfer is not deductible from redundancy money due to the transferee.

The Court of Appeal so held when allowing an appeal by Mr Leslie Pilkington from a decision of the Employment Appeal Tribunal that his employer, Royal Ordnance plc, was entitled to set off his pension against his redundancy money.

Regulation 40 of the Redundancy Payments Regulations 1985 provides:

"These Regulations apply . . . where an employee who . . . would be entitled to a redundancy payment from an employer has the right . . . which is to be paid by reference to the employee's last period of continuous employment with that employer . . .

On the vesting day he becomes entitled to claim statutory redundancy rights.

He chose the second option. On January 2 1985 Mr Pilkington had diminishing rights under the Employment Appeal Tribunal decision that his employer, Royal Ordnance plc, was entitled to set off his pension against his redundancy money.

Regulation 40(1) of the Redundancy Payments Regulations 1985 provides:

"These Regulations apply . . . where an employee who . . . would be entitled to a redundancy payment from an employer has the right . . . which is to be paid by reference to the employee's last period of continuous employment with that employer . . .

On June 23 1985 Mr Pilkington reached 60. He lost his right to redundancy pay under the company scheme, but retained his statutory rights. At that point he received a lump sum of £7,500 and a annual pension of about £2,500.

Towards the end of 1985 the need for redundancies in the company arose. Mr Pilkington was selected. On April 3 1987 he left the company, dismissed on the grounds of redundancy.

Shortly before his dismissal the personnel manager wrote to him about his statutory redundancy pay.

He said that Mr Pilkington would be entitled to statutory redundancy pay of £4,740, but that sum was to be offset by the annual value of his pension and lump sum, thus eliminating his statutory payment.

Mr Pilkington applied for full redundancy pay.

An industrial tribunal held that the company was not entitled to offset pension benefits earned with Mr Pilkington's previous employer, the Ministry of Defence. The Employment Appeal Tribunal allowed an appeal by the company. Mr Pilkington now appeals.

On the appeal the question was as to the proper construction of regulation 40(1) of the Redundancy Payments Regulations 1985.

It was not disputed that for the purpose of calculating his redundancy rights Mr Pilkington was

to be treated as if he had been continuously employed by the Royal Ordnance.

On December 21 1984 Mr Pilkington received a letter informing him that he would cease to be a civil servant, and would no longer be able to continue in the PCSPS.

The vesting day was January 2 1985, and on that date, about six months before Mr Pilkington reached 60, he transferred to another undertaking of the company, Royal Ordnance plc.

Mr Pilkington was given two options relating to his pension when he joined the company.

Under the first he would transfer all his accumulated benefits from 1980 to a new scheme, the Employment Protection (Consolidation) Act 1978, the enabling provision now in force.

Section 51 of the 1985 Regulations empowered the Secretary of State to make regulations excluding the right to redundancy payments from an employee who was entitled to a period of continuous employment or human sum pension, to be paid by reference to his employment "by a particular employer . . . when he leaves that employment."

Regulation 40(1) of the 1985 Regulations applied where an employee had the right to redundancy pay under the company scheme, but retained his statutory rights. At that point he received a lump sum of £7,500 and a annual pension of about £2,500.

Towards the end of 1985 the need for redundancies in the company arose. Mr Pilkington was selected. On April 3 1987 he left the company, dismissed on the grounds of redundancy.

Shortly before his dismissal the personnel manager wrote to him about his statutory redundancy pay.

He said that Mr Pilkington would be entitled to statutory redundancy pay of £4,740, but that sum was to be offset by the annual value of his pension and lump sum, thus eliminating his statutory payment.

Mr Pilkington applied for full redundancy pay.

An industrial tribunal held that the company was not entitled to offset pension benefits earned with Mr Pilkington's previous employer, the Ministry of Defence. The Employment Appeal Tribunal allowed an appeal by the company. Mr Pilkington now appeals.

On the appeal the question was as to the proper construction of regulation 40(1) of the Redundancy Payments Regulations 1985.

It was not disputed that for the purpose of calculating his redundancy rights Mr Pilkington was

originally made between the person so employed and the transferee." The 1984 Act provided that regulation 5 should take effect "as nearly as the circumstances permit".

Mr Smith's argument was correct. The effect of regulation 5 was to require a person who was employed by one company to be treated as though employed throughout by the transferred company.

In the present case, therefore, Mr Pilkington was deemed to have been employed by the company since 1980, although his employment did not in fact begin until January 2 1985.

Mr McMillan had, however, a second argument.

He contended that a pension could only qualify for deduction if it was not only regulation 40(1) but also 40(2).

Regulation 40(2) stipulated that the Regulations applied where the pension was a lump sum, if it was "to be paid" when the employee left the employment with "that employer" or within 90 weeks thereafter.

Mr Pilkington received his pension in June 1985 when the lump sum was paid and when the period of payment began to accrue. The period of payment began when he left the company's employment.

It followed that the pension he received from his service with the Ministry of Defence did not fall within regulation 40(1)(b), though it did fall within 40(1)(a).

Both conditions had to be satisfied, however, and, as the second condition was not satisfied, the 1985 Regulations did not affect Mr Pilkington's pension.

Accordingly, the Ministry of Defence pension could not be set off against the redundancy payment.

Mr Pilkington's appeal was allowed.

LORD JUSTICE BINGHAM agreeing with Mr Justice Smith, and **LORD JUSTICE MANN** dissenting, held that the Employment Appeal Tribunal reached a different conclusion on very similar facts.

That decision was not reconcilable with the language of the 1978 Act and the 1985 Regulations.

Lord Justice Mann also agreed.

For Mr Pilkington: Jeremy Mardon (Gordon); For the company: Janet Smith QC and Anthony Cross (Torbe & Partners); Partners; For Mr Pilkington: Mr McMillan.

Rachel Davies
Barrister

Change your view of Wales. Take a closer look at the economic scene and compare it with the UK as a whole.

Take for example, the growth rate of new business formations, and equally as crucial, their survival rate. Then take another key area, productivity of manufacturing industry. Together they are major factors in creating economic growth.

In these and an increasing number of other

important indicators, it may surprise you to see Wales beginning to overtake the rest of the UK.

But if it comes as something of a surprise, it is no coincidence. The WDA's strategy is to stimulate self-generated economic activity resulting in growing levels of indigenous and inward investment.

blue chip companies such as Ford, Matsushita, NPI, Bosch and Sony.

But a growth area also needs the professional

and service infrastructure to support corporate

development. Which is why the WDA strategy also

focuses on creating commercial as well as industrial

expansion. And why major players like Touche Ross

and Debenham Tewson rate Wales as a key growth

area. And why Rothschild have arrived.

If this all sounds like the place where you are most likely to succeed, it is.

So if your company is expanding its horizons,

talk to the people behind the scene.

Contact Anna Prokic on (0222) 222666,

or write to: The Welsh Development Agency, Pearl

House, Greville Rd, Cardiff CF1 3XX.

WDA

WE MEAN BUSINESS IN WALES

ASTRONAUT WANTED NO EXPERIENCE NECESSARY.

GLAVCOSMOS, the Soviet Space Administration, has offered a place to a British astronaut on a space flight in 1991.

Whoever is chosen will have had no experience because no Briton has ever flown in space. He or she will automatically write themselves into the history books. It is fitting that the flight is scheduled to take off on the 30th anniversary of Yuri Gagarin's historic first manned space flight on the 12th April 1991. It will be called the 'Juno' Mission.

The flight touches down eight days later.

The First ANGLO-SOVIET Space Mission. The eight days in space will be spent on the Soviet Space Station MIR from which the British astronaut will conduct scientific experiments. The MIR Orbital Space Station is a permanently operating 'laboratory in space' which has been orbiting earth since it first became fully operational in February 1988.

The British astronaut will become a full member of the Anglo-Soviet flight team fulfilling the tasks of an astronaut as well as conducting a series of scientific experiments. The mission is carrying no passengers.

The PURPOSE of the Mission.

Experiments in space which exploit the virtual absence of effective gravity in an orbiting spacecraft.

Most of the microgravity experiments will be carried out in order to advance our knowledge in basic science, others will demonstrate important principles in education and a few will test advances in space technology. The work will encompass biological experiments involving plants, cells, bacteria, and the astronaut.

Experiments in material science will include the growing of crystals, particularly of proteins, possibly the development of alloys, and the study of fluids under conditions which it is not possible to replicate on Earth.

The First COMMERCIAL Space Flight.

The mission is the first commercial joint venture between the Soviet Space Administration and British industry.

In fact it's the first ever commercially supported manned space mission of its kind anywhere in this world. (Up until now commercial opportunities in space have

been limited to unmanned satellite launches). The mission will be funded by companies paying for the research capabilities of the mission as well as by sponsorship. (Previous flights from both East and West have been funded by their governments or space agencies and although it will be the first private enterprise space mission, it is operating with the full knowledge and consent of the respective governments).

This will without doubt be just the first of many commercial flights into space, as space becomes an increasingly viable product both academically and commercially.

How is The Mission FINANCED?

The catalyst behind the mission is the Moscow Narodny Bank. This is a City of London bank which this year celebrates its 70th birthday as an established British incorporated bank.

It specialises in joint ventures and project finance and has provided the seed finance for the marketing and sponsorship raising campaigns. By co-operating closely with Licensintorg (foreign trade agents for Glavcosmos), the bank helped Glavcosmos enter commercial markets.

internationally, for the first time. The Russian word for it is Perestroika.

The mission will raise £16M in revenue from the research capability and sponsorship. Commercial organisations will be able to sponsor the flight, the astronaut, or even supply products or services for the mission.

There will naturally be a programme of media events providing coverage of the mission around the world and it will also generate educational programmes, exhibitions and lectures.

Who's at The Mission CONTROLS?

and the design and construction of much of the equipment which will be used to carry out the experiments devised by industry and universities will be carried out at Brunel University.

The Brunel Institute for Bioengineering is one of the very few organisations in the UK with experience in the microgravity field and will act as the focus for this work.

Your OPPORTUNITY to Make History.

space is open to both men and women.

Applicants will be aged 21-40 and possess a formal scientific training in either biology, applied physics, engineering or medicine, combined with good manual dexterity.

Successful applicants will have proven ability to learn a foreign language and have a high standard of medical fitness. They will also have the ability to work as a member of a team and communicate easily with people from a different background and culture.

Candidate assessment starts this month and

at later stages will include a series of demanding medical, psychological, aptitude and stress tests.

The SELECTION Process.

These will be completed by November 1989 when two final candidates will be selected to undergo a full

schedule of training in the Soviet Union at the Gagarin Centre, Star City. One candidate will fly on the

mission, whilst the other acts as back-up with duties in the running of control experiments at ground level which will be based at a laboratory close to the launch site.

How to APPLY. There is no coupon to clip and send.

The Mission has employed MSL International (UK) Limited as recruitment consultants. They are at 32 Aybrook Street, London W1M 3JL. To obtain an application form please phone 01-224 2211 (16 lines) between 9am and 7pm on weekdays and 10am and 5pm at weekends. The line will remain open until Friday 14th July 1989.

The application closing date is Monday 24th July. Only applications on the formal application form will be considered.

JUNO

ДЖЮНО

THE FIRST ANGLO-SOVIET SPACE MISSION

MANAGEMENT: The Growing Business

How Beaver dammed the flow of foreign machine tools

Nick Garnett reports on the survival instinct demonstrated by a small private British company

Tony Balding remembers the day in 1978 he walked into the North American machine tool show in Chicago and scanned the array of new Japanese metal-cutting machines on display.

Enclosed in cabinets, operated by computer controls and with machining "beds" slanted to allow easy disposal of waste metal, these new style machines were destined to ruin a lot of machine tool makers in Britain, the US and France. "When we saw these machines we knew that we had to revamp our company or call it a day. It was as simple as that," says Balding.

Balding, the family-owned machine tool maker which Balding's father Victor started in Norwich in 1951, and of which he is managing director, did not call it a day. In the grimy, underfunded and much-shrunk British machine tool industry, the little business has proved to be a gritty survivor, never failing to make a profit even through recession.

"The machine tool industry has gone through hell in this country," says Balding, casting his eye across the shop floor of his company's main factory, a rather cluttered, jumbled working space, but busily meeting a bulging order book. "So many

companies have gone down or ended up completely finished. That concentrates your mind. I won't let it happen here."

The company with the drawing of a blue buck-toothed beaver on its logo is a good example of the survival instinct inherent in a family business but also of the limitations of such a species, particularly in Britain.

Though continuously profitable, Beaver has demonstrated a financial performance that is somewhat short of earth-shaking. Its yearly sales hover around £12m. With nearly 300 employees that is a turnover of less than £40,000 per employee. The best ever profit return on sales was 7.5 per cent.

If it had been a publicly quoted company, facing the consequent pressure to perform, Beaver would probably have gone the way of large chunks of the British machine tool industry. Some West German companies which started off in family ownership around the same time have sales ten to 15 times that of the Norfolk company.

A dozen British-based machine tool builders have significantly bigger turnovers, and some, like Bridgeport, based in Leicester with sales of £60m, have far superior production plants.

But in a British industry

that is still contracting floorspace and rationalising products – even if factories are busy – Beaver is proving to be an investor. Already a producer of machining centres for manufacturing angled components, in 1984 for the first time it started manufacturing its own in-house designed lathes for machining round parts.

"We used to import them for sale from Yangtze in Taiwan and latterly from PPL in Italy but we had no control over the product. So we decided to design and build our own turning centres," says Balding, 42. Beaver opened a new production plant and assembly hall in Peterborough last year to continue this work.

It also opened a component manufacturing hall in Suffolk in 1986 and has contracted to sell the factory and six-acre site in Norwich next year, the proceeds from which will buy a nine-acre site and purpose-built plant on cheaper land further from the town centre. "It will all be ploughed back into the company," Balding says.

Beaver has recently spent £700,000 developing a new large horizontal machining centre and claims to spend between 7 and 10 per cent of sales on new equipment and product development. Beaver has also had some success as a licensor with two of the largest machine tool

builders in India making Beaver machines.

Like most British machine tool makers, Beaver has faced severe pricing constraints. "Seven years ago, a 2.5 tonne machining centre sold for £21,500. The equivalent of that machine now weighs 5 tonnes, has twice the power and sells for £36,200. That is an awful cost pressure."

Like much of the British industry too, Beaver spent too long producing lower cost machines, an area that has suffered from aggressive pricing from Taiwanese makers.

The West German machine tool industry has long fled this product zone. Beaver has gone further upmarket in the past two years; the 300 machines it sold last year ranged in price from £36,000 to £250,000. It is also doing far more customisation, adding carousels and other handling devices to meet individual company requirements.

Beaver still displays some of the plant inefficiencies which continue to bevel parts of British industry though Beaver is attempting to sort these out. The time it takes to get a raw casting to finished machine assembly has tumbled in the past few years from twelve weeks to twelve days.

Balding was not alone among British machine tool

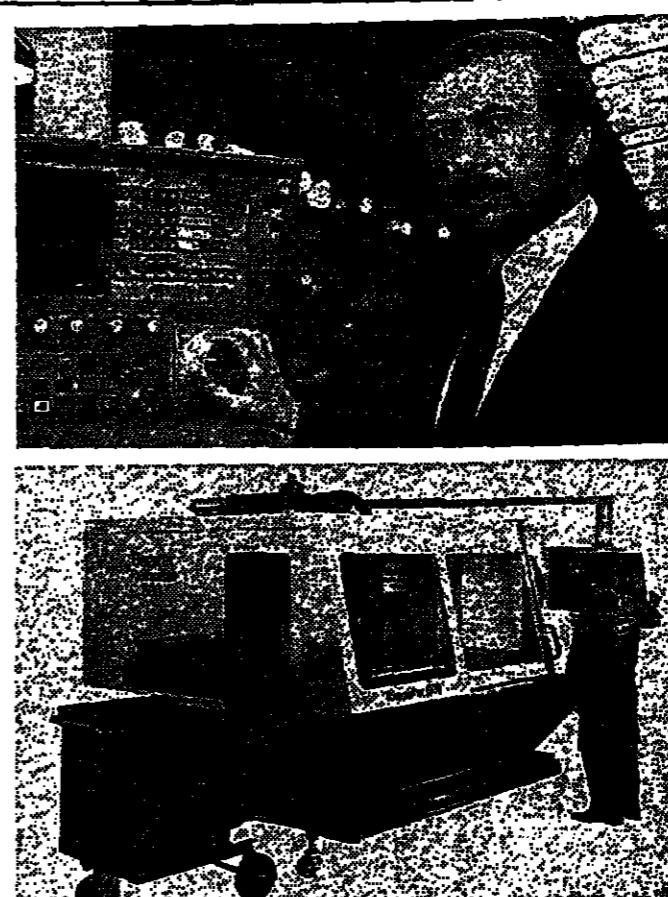
managers at being surprised – and not a little ashamed – when he first visited the plant opened in Worcester two years ago by Yamazaki, the Japanese machine tool maker. Its large, carpeted reception areas, enclosed garden and high-tech, virtually unmanned machining shop floor made a stark contrast with the old tatty buildings that still pervade British mechanical engineering.

He went back and jazzed up the reception area at the existing Norwich site; the new Norwich plant has been designed with open-plan bays and a flow system of components entering the plant to final machine assembly.

If Beaver is a typical small, family-owned British manufacturer, it is untypical in the impatience Balding displays with what he sees as a pervasive anti-industrial culture promoted by the present, and previous, governments.

"I don't want to sound like a moaning Minnie but some problems have got to be faced. I don't think the government has any idea how difficult it is going to be to rebuild a lot of industry that has been lost. It is probably too high a hurdle for the country to clear. For instance, I think the tax structure here is not conducive to corporate investment."

"You've got to have a posi-



Tony Balding (top): Beaver spends between 7 and 10 per cent of sales on new equipment and product development

tive approach nationally that says there must be a strong manufacturing sector. If you haven't, you go backwards with your balance of payments."

Balding has raised a few eyebrows within his own industry

because of his forceful criticisms of British machine tool making at a time when many plants are busy meeting a generally strong European demand. Says Balding, "In the long run, some of these companies just will not survive."

Experience of the Elephant

THE Government's recently introduced scheme for Training and Enterprise Councils poses both a threat to and an opportunity for the future of job creation and small business support organisations that rely heavily on local authority funding.

This is one of the conclusions of a study by four MBA students at the London Business School. The students have based their views on a detailed look at Elephant Enterprises. Supported by the London Borough of Southwark, the organisation has over the past five years been providing advice and subsidised premises to unemployed people in the borough who wish to start their own business.

The effect of the TECs, according to the study, will be to reduce the role played by local government in providing job creation services. They say that the Government has shifted its emphasis away from supporting self-employment towards re-training via employment training schemes.

The study maintains that organisations like Elephant cannot continue to operate in isolation. Co-operation with complementary agencies and the establishment of strong links with TECs will be essential; but, if successfully achieved, will also allow these small organisations to escape the one year "funding trap" that can reduce their effectiveness.

The study suggests that Elephant should adopt a more businesslike approach to its own structure and policy-making – though, overall, it finds the quality of its advice services praiseworthy.

Elephant should develop a three-year business plan with measurable targets and performance criteria for the services provided. It should also, maintains the study, limit Elephant's activities to specialist areas of advice and help to small start-ups and develop relations with bodies like Business in the Community (the umbrella organisation for enterprise agencies).

Reverend Peter Cahillen, chair of Elephant, says: "We want to continue to create employment for people with skills and determination but no financial resources or business expertise, but to do this we have to be able to take advantage of government initiatives and to respond effectively to local needs."

Filling the gaps in knowledge

A study costing £1.4m is to be carried out to assess whether the unprecedented recent growth in the UK small business sector is likely to continue.

The project has £1m worth of funding from the Economic and Social Research Council (ESRC) while a further £400,000 – slightly less than the organisers first hoped – has been raised from private and public sector sponsors: Barclays Bank, the UK Department of Employment, the Rural Development Commission and the Enterprise Directorate of the European Commission.

The study is claimed to be the most comprehensive analysis ever undertaken in the UK of the problems peculiar to small business. The small firms sector has been the subject of intense scrutiny in recent years by governments, the private sector and academics but there

are still large gaps in the knowledge of its contribution to the economy and how it can best be encouraged.

The ESRC says that increasing competition from continental Europe after 1992, the development of new information technologies and a growing services, as against manufacturing, sector will affect the prospects for small firms.

"The conditions which have allowed 1.5m new businesses to set up in the past decade will change radically over the next ten years," says Professor Howard Newby, chairman of the ESRC.

"If small business is to continue to thrive we are determined to obtain a clear understanding of these long term changes and how they affect the prospects for individual small firms."

The programme will be split into projects carried out at three different institutions while individual researchers

will supplement this work with an additional 13 projects. Cambridge University will look at the constraints on the creation and survival of small business; the relationship between availability of local employees and smaller firms will be researched by a team at the Institute of Manpower Studies at Sussex University; while Kingston Polytechnic will research small businesses in the service sector.

The studies will concentrate largely on the small firms climate in Britain but two of the projects will look at support programmes for small firms in Britain, France and Belgium and at co-operatives and small private firms in Mediterranean Europe.

The entire programme will be co-ordinated by David Storey of the Small and Medium Size Enterprise Centre at the University of Warwick.

In brief...

■ A pack of new brochures aimed at answering many of the questions which face those starting up in business for the first time has been launched by the Department of Employment.

Services for Small Business

provides an overview of the help which is available with a list of contact organisations.

Starting and Running Your Own Business gives a succinct description of many of the issues which new businesses must address. Cash flow forecasts, business plans, premises, the law and marketing are among the subjects covered.

Working for Yourself provides practical advice on the daunting but essential questions such as registering for

VAT and paying National Insurance Contributions.

Available free from the Department of Employment, Carlton House, Trafalgar Street, London SW1H 9NF, and from local offices of the Small Firms Service.

■ Are you suited to starting up in business on your own? 3i, Britain's largest provider of venture and development capital, has published a guide to what it takes to bring into being the kind of business most likely to succeed.

Entrepreneurial qualities such as determination, drive and boldness are vital but managerial experience often makes the difference between success and failure, says 3i.

100% PROPERTY FINANCE AVAILABLE

We have completed arrangements with a major Merchant Bank to provide 100% financing for quality Property proposals.

Corporate Finance Facilities are also available for flotation, acquisition or capitalisation purposes.

MINIMUM: £1,000,000

Principals only should write to: CORPORATE FINANCE CONSULTANTS LTD, 77 Moscow Road, London W2 7EL, or Telephone: 01-727 6474 Telex: 2953620 Fax: 01-231 1196



LE MANS 24 HOURS/DAYTONA 24 HOURS/IMSA/GROUP C

Successful established British/world championship racing team seeks financial support from individual or group of businessmen with a mutual interest and desire to become involved in one of the highest levels of motorsport. Considerable corporate promotional opportunities with full client hospitality back up.

Telephone: 0903 884782, Fax: 0903 884774

Success is a part of our team

We are Germany's largest independent insurance broker with 200 associated agencies. We are prepared for the challenges for 1992. We look forward to providing insurance services for companies of the United Kingdom.

BCA GmbH

Eschersheimer Landstrasse 69

D-6000 Frankfurt am Main 1

Small UK based company operating in the fast expanding field of disinfection has recently developed a diverse and innovative product range of medical wiping cloths, not being used in the medical field, food hygiene, laboratory, safety, janitorial and food markets. Seeks alliance with major trade partner to optimise exploitation opportunity.

Write Box A182, Financial Times, One Southwark Bridge, London SE1 9HL

INFECTION CONTROL

For established electronics company, operating in the Thames Valley, has available capital for the design and/or manufacture of electronic and electromechanical products. Companies required for various levels of assembly from pilot to finished product.

All responses will be treated as confidential. Write Box F8988, Financial Times, One Southwark Bridge, London SE1 9HL.

DESIGN & MANUFACTURE OF ELECTRONIC PRODUCTS

As established electronics company, operating in the Thames Valley, has available capital for the design and/or manufacture of electronic and electromechanical products. Companies required for various levels of assembly from pilot to finished product.

All responses will be treated as confidential. Write Box F8988, Financial Times, One Southwark Bridge, London SE1 9HL.

HARD TO BORROW?

No Credit Check

Guarantees Provided

We do not make loans

Minimum £100,000

5-20 years

The Funding Assistance Corp.

U.S.A. (212) 755-9400

Fax (212) 755-7339

PRIME US-TEXAS Properties

IJC is representing one of the large

real estate brokerages Co. in Texas.

They highly developed market

there are many opportunities for

professional real estate investor to

invest today in prime Texas

property management and positive cash flow.

For substantial appreciation.

For further details please write or

call

IJC/Bairns F.L. 9496 P.O. Box 17

Lubbock, Texas 79421

U.S.A. (806) 745-4107, 745-4108

principal.

US\$ per project.

Interested parties please write or

fax to IJC/Bairns F.L. 9496 P.O. Box 17

Lubbock, Texas 79421

principal.

PRIME US-TEXAS Properties

IJC is representing one of the large

real estate brokerages Co. in Texas.

They highly developed market

there are many opportunities for

professional real estate investor to

invest today in prime Texas

property management and positive cash flow.

For substantial appreciation.

For further details please write or

call

IJC/Bairns F.L. 9496 P.O. Box 17

Lubbock, Texas 79421

principal.

FINANCIAL TIMES

NUMBER ONE SOUTHWARK BRIDGE, LONDON SE1 9HL
Telephone: 01-873 3000 Telex: 922186 Fax: 01-407 5700

Tuesday July 4 1989

Solidarity's main chance

THE announcement of Andrei Gromyko's death will prompt renewed reflection on thirty year period in Soviet foreign policy, until the mid 1980s, which he dominated. Too much reverence towards that regime, however much stamina it showed, is unnecessary. For while Gromyko achieved a certain "stability" in superpower relationships, he did so at many costs. Among the heaviest was the continuing subjection of Eastern Europe to the Brezhnev doctrine, whose unwritten rules laid down that the Soviet version of state socialism, which they had all performed, adopted, was unchallengeable.

That doctrine, the present Soviet leadership now asserts, shrivelled soon after Mr Gromyko left office. President Gorbachev continues to repeat that the satellites can go their own way. Only yesterday, Mr Vadim Zagladin, a central committee member and foreign affairs expert, said in Paris that a Solidarity government was the Poles' business, and that a President Lech Walesa would be quite welcome in Moscow.

That is good for Poland, but only the beginning of a new chapter. There is now no effective centre of power in Warsaw. The Polish United Workers Party cannot agree on a Presidential candidate. The Government, not a year old and with its reforms hardly taking effect, is led by a cabinet full of men who were badly beaten at the polls. The Party's two long serving coalition allies, the Peasants' and the Democratic Parties, are peeling away as they realise real power lies elsewhere.

Awful responsibility

As for Solidarity, it is gradually realising what awful responsibilities are attendant on winning so completely. Mr Walesa and Professor Bronislaw Geremek, the leader of the Solidarity deputies and a fellow moderate, agreed that the union should support a reforming government but take no part in it. They now find to their horror that they have no government to support. As recently as April, Solidarity leaders talked as though legalisation of the movement was

Hold firm on law reform

WHEN THE Government published its proposals for reform of the legal profession in January, it was applauded for its determination to sweep away outmoded restrictive practices and introduce greater competition into the provision of legal services. Those who had said it would not have the courage to carry its enthusiasm for reforming the trade unions into areas dominated by its natural constituents fell momentarily silent. In the face of noisy and often bitter protest from the Bar and the judiciary, Lord Mackay remained firm. The more the judges warned of the constitutional dangers inherent in the Government's plans, the more his determination to press ahead appeared to grow.

At the last hurdle, as the cabinet committee responsible for competition policy comes to consider the final proposals, the Lord Chancellor is now said to be having second thoughts about ending the barristers' monopoly to appear as advocates in the higher courts - the central plank of the reforms. This would be a mistake.

Unclear climbdown

Quite why the Government should uncharacteristically be considering such a climbdown is not clear. Is it possible, for example, that in the light of the Conservatives' poor showing in the recent European elections, the voices inside the party that have been warning that the Government is flirting with political suicide by taking on both the doctors and the lawyers at the same time are finally being listened to? If that is the case then the Government has underestimated the strength of support for its reforms around the country.

The public may not like the idea of free market forces in the provision of health care, but they have long been able to see that the requirement to employ the services of two lawyers to take their case into court that the lawyers themselves. To be fair to the Lord Chancellor, he has never ruled out the possibility of changing the proposals. Despite the criticism levelled at him for producing the papers without consultation with the profession or the

limit of their aims. Three months later, they see that at least partial power may be within their grasp.

It will be risky, but they should grasp it. They will inherit a crisis which was none of their making, the handling of which would damage the reputation of justice. Living standards are likely to get worse before they get better; unemployment to become real rather than hidden; work to get harder, and pay differentials to widen. In this way will the market come to Poland - it has no alternative.

They will also inherit a bureaucracy and a management class which is a *nomenklatura*, put there by the Party for loyalty rather than efficiency. This creaky machine may not work for Solidarity ministers; even more to the point, the army and the police, who rounded up and imprisoned Solidarity members, may not take orders from them.

Soviet test

Further, there must still be doubt that the Soviet Union will really let it all happen. It will not be easy to let people whose sympathies lie more with the West than the East, who are settled in Western capitals as anti-communists, take control of a member of the Warsaw Pact. It would be by far the biggest test a perestroika's foreign policy had yet had to face.

But perhaps these risks are more apparent than real. A Solidarity prime minister would inspire greater generosity in the West and more confidence from business than a Communist one, be he never so reformist, even could. Many bureaucrats, in the stillness of the voting booths last month, voted for Solidarity; so did many of the conscript soldiers and maybe even a few of the police. And if a Communist President were found - Mr Walesa favours General Kiszczak - then Soviet fears would be allayed.

The movement Mr Walesa leads, has done Poland immense service in the past decade. It has more difficult service still to do. It no longer represents freedom in revolt; it must attempt to be freedom in Government.

Not a brick to drop

JUDICIARY, he has always emphasised that they were consultation documents and that he would not hesitate to modify them if persuaded by rational argument. The opposition from the judges, the Bar and the Law Society to the proposed Advisory Committee on the education, training and conduct of lawyers led him at a fairly early stage to indicate that there was room for manoeuvre over the committee's structure and role.

Status quo guarantee

The suggestion that to placate the judiciary he is considering giving them a right of veto over who should have rights of audience in the higher courts makes little sense, however. Solicitors know that this would effectively guarantee maintenance of the status quo. The strength of their opposition to the Government proposals shows only too well that the senior judges, all of whom were drawn from the ranks of the Bar, cannot be trusted to exercise such a veto impartially, they say.

If the Lord Chancellor is convinced of the need to give ground to the judges on this issue, he should consider the suggestion favoured by the consumer organisations of setting the principles governing wider rights of audience and the professional codes of conduct in primary legislation, and giving the judiciary a supervisory role over the regulations governing their implementation. This would meet all the constitutional concerns that have been expressed over Parliament's sovereignty, the independence of the profession and judicial supervision.

The proposed reforms of the legal profession are just one part of the Government's wider plans for improvements in access to justice and the provision of legal services. They are linked to the five-year plan to introduce reforms in civil procedure, changes in the administration of the legal aid system and the gradual unification of procedures for dealing with children and family law matters. If the Government drops the central plank of its proposed reform of the profession, there is a danger that its whole law reform strategy will fall apart.

There is a ration of one each, and clearly the intention is that the offer of a brick is not one that should be lightly turned down. Wait for the Sandberg letter: it also

As the world's first museum devoted to industrial design opens in London, Alice Rawsthorn reports on the discipline's role in British industry

On Thursday the dust and debris of the construction workers will be cleared away as London's Design Museum, at Butler's Wharf on the banks of the river Thames, opens its doors to the public.

The Design Museum will be the first museum anywhere in the world devoted entirely to industrial design. Its opening is timely. The past decade has been one in which the design industry has boomed; when Britain's shops have been painted in post-modernist pastels; and politicians have proposed the power of design from public platforms.

But there are serious doubts whether, for all the fuss and furore, British industry is any more adept at using design than before. Even so design continues a sector as it still uses design as a cosmetic tool rather than an integral part of the management strategy. Many areas of manufacturing appear as antipathetic to design as ever.

There is also a real risk that once the current enthusiasm fades, design will be dismissed as yet another management fad that was once fashionable and has since fizzled out. Stephen Bayley, director of the Design Museum, already dreads the day when industrialists describe design as "Something we tried out in the 1980s. It did not work then. So we will not try it again."

Perhaps the discipline's most prominent legacy of the 1980s is the design industry. It began the decade as a cottage industry of tiny firms with fragile finances. Today there are thousands of design companies. Some have gone public; others have expanded overseas. Fitch, which entered the 1980s as a retail design specialist, has since gone public and staged a series of acquisitions. It now employs 500 people in the UK and the US.

Moreover the character of the design industry has changed. The word "designer" once conjured images of the work of William Morris and his school of aesthetic artisans. The designers of the 1980s tend to talk in terms of market research, brand identity and corporate strategy. The larger corporate identity consultants, like Wolff Olins, employ almost as many MBA graduates as designers. The international advertising agencies, Saatchi & Saatchi and WPP, have diversified into design.

Beneath the business school banner and stock market notations, the industry is still highly fragmented and its finances are as fragile as ever. A recent survey by James Capel, the stockbrokers, estimated that only 30 consultancies employ more than 100 people. Even the biggest companies are prone to erratic profits growth, as the recent problems of the Michael Peters Group, which is suffering from a slump in its US business, illustrate.

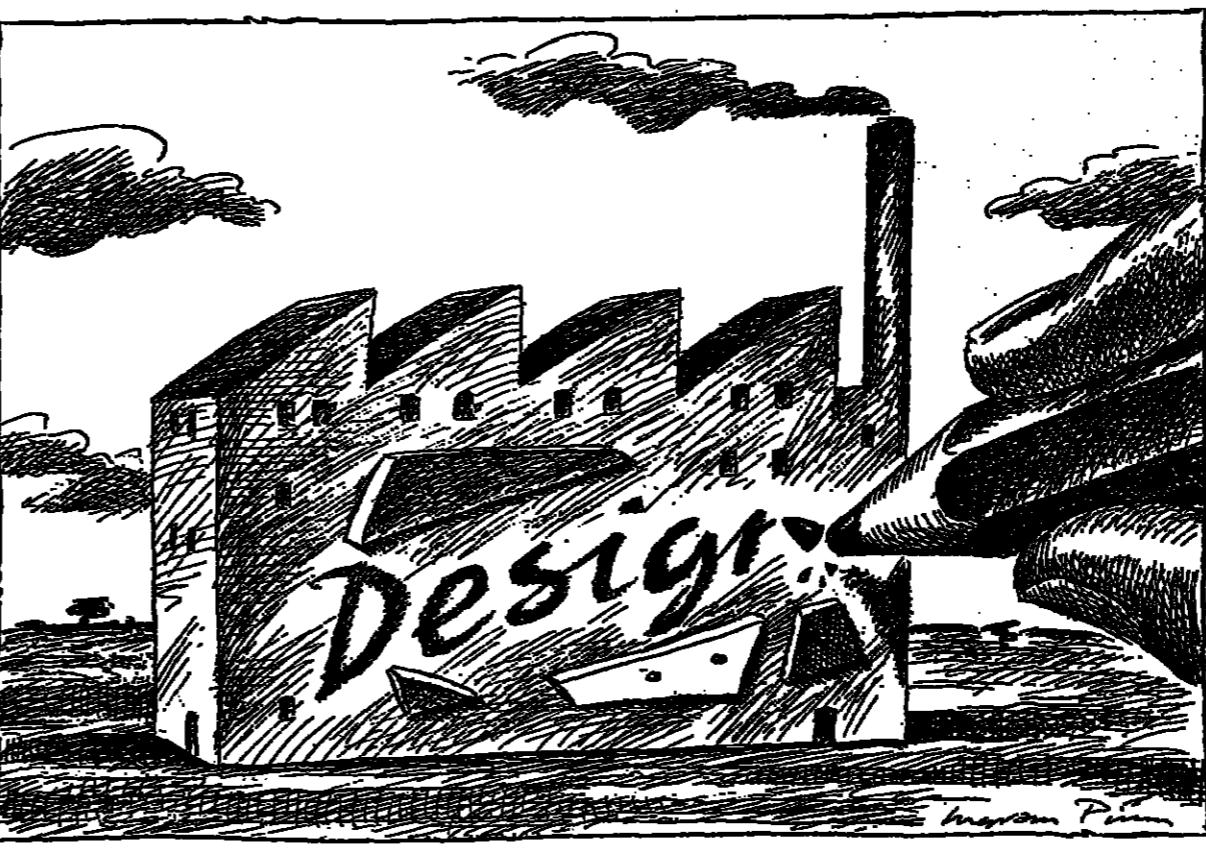
But design is seen as a successful sector. And the design consultancies have succeeded in redefining design, alongside advertising, as a marketing discipline. The world of William Morris is far, far away.

The dynamism of the design sector is often bandied about as evidence that design is being taken more seriously in the wider sphere of industry. This is not necessarily the case. Even the most enthusiastic advocate of design would admit that its influence on British industry in the 1980s has been, at best, erratic.

Mr Wolff Olins, chairman of Wolff Olins, believes that attitudes towards design in industry have changed "dramatically" in some sectors, such as retailing, but "barely at all" in the more traditional areas of manufacturing.

The impact of design on the retail sector is apparent to anyone who

A fad that may have had its day



glances along the high street. The catalyst for the transformation of many previously dowdy shops was the wave of corporate activity which reshaped the retail sector in the early 1980s. This activity created a new cadre of design conscious retailers - like Next, Burton and Storehouse - which were prepared to lavish millions of pounds on the look of their shops.

Next spent £12m on capital expenditure - a large tranche of it on fitting out its shops - in the last financial year alone. Storehouse has devised a method of design management to encompass every aspect of its operation. The design process for Richards, the women's wear chain, starts when the design studio meets to map out the key themes for the coming season. It ends a year later when instructions are sent to each store manager explaining exactly how the clothes should be displayed in the shop.

Next spent £12m on capital expenditure - a large tranche of it on fitting out its shops - in the last financial year alone. Storehouse has devised a method of design management to encompass every aspect of its operation. The design process for Richards, the women's wear chain, starts when the design studio meets to map out the key themes for the coming season. It ends a year later when instructions are sent to each store manager explaining exactly how the clothes should be displayed in the shop.

Yet many retailers still see design in terms of the look and lay-out of their shops, rather than as an integral part of management and merchandising systems. Even the Burton Group tends to make a distinction between store design, which is delegated to external consultancies, and merchandising, which is handled internally.

This tendency to regard design as a superficial discipline, not as an integral part of the organisation, is even more marked in manufacturing.

The level of awareness of design in manufacturing has certainly increased in the 1980s. Mrs Margaret Thatcher, the Prime Minister, took the initiative by including the importance of design as a regular ingredient

of her speeches to industry. She also encouraged the Department of Trade and Industry to introduce grants for small business using design consultancies.

It is now *de rigueur* for company chairmen to cite design as a critical component in competitiveness. The latest annual report from Coloroll, the aggressive home products group and one of the new generation of manufacturers, opens with a list of its corporate objectives including "creativity in design." A new breed of executive,

the design manager, has appeared in the boardrooms of businesses like British Rail and British Telecom.

Sir Terence Conran, the founder of the Design Museum, has noticed a "great improvement" in the level of awareness of design among the manufacturers he deals with as chairman of the Storehouse retailing group.

Yet there is little evidence that British manufacturers, having acknowledged the importance of design, really understand it. Mr Peter Gorb, senior fellow in design management at the

London Business School, says there are still "far too many managers who see design only in terms of style and aesthetics."

In Japanese industry, design is seen as an integral part of the company's activities. Designers are involved in every stage of product development from raw material sourcing to production planning. A corporation like Yamaha, with annual sales of over £2bn, employs a team of 22 designers, all with degrees in product design. They are responsible for every aspect of design from liaising with Yamaha's engineers over product development to devising logos for letterheads.

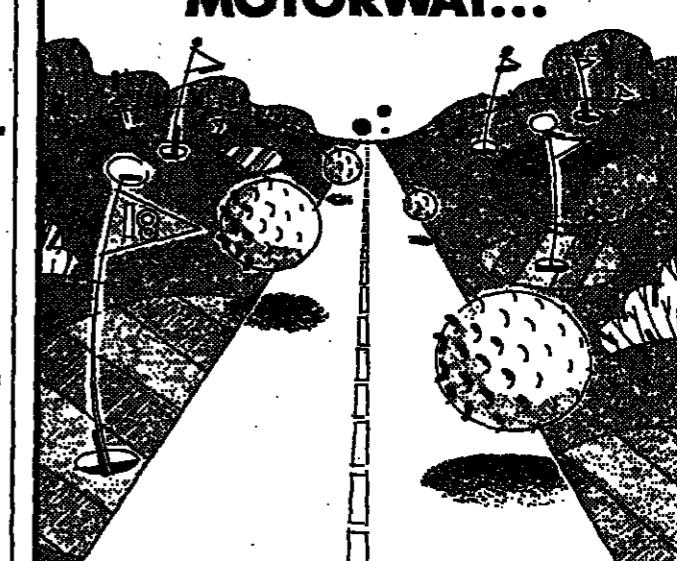
Such a system is typical of many Japanese companies. It is difficult to find a similar arrangement in Britain. Similarly there is no designer in British manufacturing whom is accorded the same status as Dieter Rams, the head of product design at Braun, the West German consumer electronics group.

In British industry, product design tends to be meted out to external consultancies, which tend not to be involved in internal processes like production planning. Alternatively it is left to engineers, who are not necessarily proficient in design.

One of the ironies of the past decade is that, although British companies have become much more aware of design, they have made little progress in using it.

One explanation lies in the shortcomings of the education system. Design plays a relatively insignificant role in specialist courses such as engineering. A London Business School study estimates that only 7 per cent of a British engineering degree syllabus

YOUR VERY OWN MOTORWAY...



PLUS THREE CHAMPIONSHIP GOLF COURSES

West Lancs with its towns of Ormskirk and Skelmersdale connects nationwide via its own M68 motorway linked to M6 and M62. Only the shortest drive from Royal Birkdale, Royal Lytham St Anne's and Royal Liverpool. Just 30 minutes from the UK's second largest population concentration, West Lancs greenfield sites offer pastures new to industry and commerce.

PLUMB IN WEST LANCs

I would like to know more. To: Fred McCleughan, The West Lancs Project, Westgate Pennylands, Skelmersdale, Lancashire WN8 8LP. Tel: 0695 50200. Fax: 0695 50112.

NAME _____ POSITION _____

COMPANY _____ ADDRESS _____

TELEPHONE _____

THE
WEST
Lancs
PROJECT

Cuckoo lore

THE rainy climax to June put an end to Bill Foggitt's personal drought at the Three Tuns in Thirsk where he has recovered his reputation as the farmers' friend.

Cuckoo lore

THE rainy climax to June put an end to Bill Foggitt's personal drought at the Three Tuns in Thirsk where he has recovered his reputation as the farmers' friend.

Hanging matter

Card in a Fulham shop window: "For sale, walnut wardrobe with two drawers, three shelves, and ample hanging space for man."

is concerned with design, compared with 25 per cent for a comparable course in West Germany.

Design is also missing from general syllabuses. The design and technology course for primary school children due to be introduced in 1990 as part of the national curriculum may lessen the problem. But teachers are concerned that the course will not be properly resourced.

Another explanation is that the British have never really felt comfortable with the concept of design. In Japan, design is seen as the province of industry. In Italy, it is regarded as part of the arts. In Britain, however, it is seen as a discipline straddling both sectors.

The arts establishment tends to dismiss design as indelibly tainted by its association with trade. Sir Terence Conran recalls meetings at the Victoria and Albert Museum where he would be ticked off for calling things "products" rather than "artefacts."

Conversely the industrial community looks askance at design as an aesthetic indulgence. The recent run-up over BP's new corporate identity was provoked partly by the cost of the programme and partly by concern that an important company should have invested so much effort and energy in something so apparently slight as design.

The success of the design industry in redefining design as a marketing discipline has helped to overcome this problem. But it has also reinforced the stereotype of design as something which is "bought in" from outside.

This tendency to "buy-in" design could, in turn, accentuate the risk that design is seen as a management fad.

Peter York, the style writer, suspects that the managers of the 1980s have seized on design as "an instant fix" in the same way as they did with advertising in the 1960s. This increased the risk of them becoming disillusioned with design, he says, without "ever having really understood it in the first place."

There are already indications of disillusion with design in the retail sector. In the mid-1980s, when consumer spending was soaring, design conscious stores like Next were the stars of the retail sector. At the time a commitment to design - and an aptitude for spending substantial sums of money on it - was perceived as a prerequisite for successful retailing.

The climate in the retail sector is

now more competitive. The slowdown in consumer spending, combined with rising costs, has imposed intense pressure on profits in an over-shopped high street.

At the same time the design consultancies, including Next, have been struggling. One of the chief critics levelled at George Davies, when he was ousted as chairman of Next last December, was that he had spent too much money on store design.

Design is no longer the fashionable phenomenon in retailing. Since the start of the year expenditure on retail design has fallen sharply. Next, and its competitors, have pruned budgets and postponed projects. It is too soon to say if this is a short-term response to the austere climate in retailing, or indicates a longer-term disillusion with design as a discipline.

Even the Government seems to have lost interest, although Mrs Thatcher is still fond of sprinkling references to design in her speeches. Design grants for small businesses have been cut. The Design Council has gone from crisis to crisis.

Back at Butler's Wharf, as the construction workers clear their tools away, Stephen Bayley winces at the inevitable wisecracks about a design museum that is opening at the very end of Britain's design decade.

Up to 150

LETTERS

'Only one spark of hope for broadcasting'

From the Chairman of Granada Television.

Sir, There is one spark of hope – but only one – for the future of broadcasting in Mr Tim Renton's letter (June 29). He does not name home as remorselessly as did the Home Secretary in his most recent statement that only in exceptional circumstances would any bid other than the highest be acceptable to the Independent Television Commission in awarding franchises to companies which have passed the so-called 'quality threshold.'

He says, instead, that "all we are requiring the ITC to do is to make public its reasons if it considers that any bid does not meet these criteria."

If that can be interpreted without excessive optimism as a change of tone, it is to be welcomed. Any move which holds the promise of strengthening the discretionary powers of the ITC, and reducing the scope for financial opportunities at the expense of programme standards, is worth encouraging.

Taken as a whole, however, Mr Renton's arguments are disappointingly familiar.

Now that the Home Office has received upwards of 3,000 responses to the white paper (many of which, we are led to believe, express hostility to the principle of auctioning franchises) it is not good enough for the Minister merely to repeat the original Government proposals as though they were based on some eternal, unchallengeable truths.

If the Government is not going to take into account public views on television – let alone those of people working in the industry and bodies representing consumer interest – why invite comments in the

first place? Flawed policies are not made any sounder by constant repetition.

Tim Renton accepts that there is a real problem in defining the "quality" of television programming satisfactorily, but none the less goes on to rest much of his case on the reliability of the screening process represented by the preliminary assessment stage. Crossing the "quality" threshold will be "no mean task" he says.

But why? Any experienced television practitioner could put together a portfolio of programme ideas to meet whatever criteria are considered appropriate by the ITC – ranging from a comprehensive regional service to lustrous drama to the coverage of white-knuckle sporting events.

If no specific programme requirements are laid down, imaginations will be given free rein – but any pretence of a meaningful quality assessment will disappear. All the ITC can do in the first round is check for evidence of sound finance, relevant management experience, access to creative skills of appropriate calibre and the moral probity of the applicants themselves.

Most of those who take the trouble to prepare a decent prospectus will get past this hurdle, because there will be no specific grounds for blocking them.

How can you, with total confidence in advance, that a particular individual is or is not going to live up to his promises?

The handing-in of tenders will thus become not the final step in a narrowing down process, as the Government likes to paint it, but the prime determinant of the outcome. The starting gate for the horses will

merely have been moved a little further up the field.

Mr Renton says that there is nothing new in this situation. But there is.

In the past, the Independent Broadcasting Authority has pursued its questioning of franchises applicants, and its detailed examination of proposals, in successive stages and with exhaustive thoroughness. It has also given due weight to the track record of programmes seeking renewal of their franchise. The weighing up of rival merits has continued until (as with the election of a pope) one candidate has emerged as being more generally acceptable than the others.

That is the proper exercise of discretionary powers; a difficult task, but no more so than the selection of candidates for many other types of post involving the public interest. The IBA's selection process has its faults, but the overall success of its efforts can be gauged by the standard of the programme service which ITV provides – not perfect, but on the whole well-regularised at home and overseas.

The sort of pleasurable television experience which Mr Renton probably has in mind when he uses the elusive word "quality" comes about by a curious fusion of idealism, ambition, aptitude, restlessness, obsession and other intangibles. Money is also needed in large amounts to make programmes, good or bad.

But – as the Government will discover if it pursues its present course – the ability to sign a cheque is the least reliable guide to a company's fitness to provide what the nation really wants: a television service worth watching. David Pilkington, *Granada Television, Manchester*

"WE ARE just beginning to close the socialist parenthesis. My esteemed colleague Samuel Brittan was offering a glass of wine to the first person to get that sentence into a newspaper without inverted commas. I forfeit the reward because my conscience will not let me steal it from its true author, the French historian François Furet, who gave the annual Foundation Lecture at Ditchley Park last weekend.

Mr Furet's chosen title was "The French Revolution and the Development of Western Democracy," and his lecture was rich in ideas, as well as in show-stopping phrases. So much so that I cannot forbear to inflict on you what I promise will be positively the last appearance in this column of the *Bore of the Year*, alias the Bicentenary.

It is perhaps appropriate to do it on July 4, rather than 14, because the essence of Mr Furet's thesis is to reclaim the French Revolution as the sister of the American Revolution rather than the mother of the Russian. For the previous generation of historians, heavily influenced by Marx, 1789 was "the beginning of the emancipation of Man, but only the beginning because it was a failed revolution, a bourgeois revolution" which had to be completed by the emancipation of the proletariat. It was 1917 which provided the real dividing line in modern history.

Only now, says Mr Furet, "as Eastern Europe began calling for the Rights of Man, free elections and what the Marxists called 'formal democracy'" have we discovered that in fact the key division was the "democratic revolution" (both American and French) of the late eighteenth century. "The Bolsheviks thought that with 1917 they had buried 1789. Here, at the end of our century, we see that the opposite is happening: it is 1917 that is being buried in the name of 1789."

Mr Furet concluded with the confident assertion that in western Europe the principles of 1789 have now been "mastered at last and embodied in free institutions, and thereby [brought] closer to the Anglo-Saxon tradition." Europe, he believes, "having once invented the nation-state – that remarkable instrument of civilisation which almost proved fatal – is now facing the challenge of inventing a new form of community composed of a collection of peoples who have for so long been in conflict. A shared economy will not be enough, nor will a 'Europe of nations' or, conversely, a 'Nation of Europe' conceived along the lines of the nations which have

populated its history." Europe, "having issued from a victory of societies over nations," would now have to "come up with a different kind of popular will, that will be as strong as the feeling of belonging to a nation – something the European institutions are too young to inspire."

What exactly can inspire it remains unclear. Perhaps that very idea of "victory of societies over nations"; the awareness, as Mr Furet puts it, of having "learned how to handle more prudently the store of emotions that constitute membership in a nation. That could form the basis of a West European identity if, as seems all too likely, the lesson takes longer to learn in other parts of the world. It could distinguish western Europe from regions where the nation-state is of more recent origin, or where nationalism, after a long period of being suppressed by imperial or pan-nationalist communism, is still seen as the essence of freedom.

Mr Furet concluded with the observation that in western Europe the principles of 1789 have now been "mastered at last and embodied in free institutions, and thereby [brought] closer to the Anglo-Saxon tradition." Europe, he believes, "having once invented the nation-state – that remarkable instrument of civilisation which almost proved fatal – is now facing the challenge of inventing a new form of community composed of a collection of peoples who have for so long been in conflict. A shared economy will not be enough, nor will a 'Europe of nations' or, conversely, a 'Nation of Europe' conceived along the lines of the nations which have

FOREIGN AFFAIRS

From UK subject to European citizen

Edward Mortimer on how the French Revolution intertwines with other political traditions

citizens. Yet he also said the big difference between the American and French Revolutions was that in America "you have the recovery of English common law"; and his reference to the "Anglo-Saxon tradition" implied that the doctrine of limits on power, even when that power is based on popular sovereignty, is common to Britain and the US.

That may have been partially true in the eighteenth century, when the King of England was still an executive head of state, on whose powers those given to the President in the US Constitution were roughly modelled – though even then Britain had no written constitution and no judicial body capable of judging the constitutionality of decisions taken by the King in Parliament. But ironically enough the War of American Independence was the last occasion when the King's influence was decisive in determining the composition and policies of a British government. Thereafter the role of the monarchy was gradually reduced to an almost entirely symbolic and ceremonial one, while the doctrine of popular sovereignty associated with the American and French revolutions gained ground in Britain too.

And by a further irony, in Britain it took the form of "parliamentary absolutism" – one of those negative aspects of the French Revolution, according to Mr Furet, which France has now at last grown out of. More than the careful distribution of power among different levels and institutions of government, which he sees as "Anglo-Saxon" but which was in fact specifically American. Sovereignty in Britain today is located exclusively in Parliament, or rather in the House of Commons which alone derives its authority directly from the people. Even such fundamental liberties as *habeas corpus* and freedom of expression are not entrenched, but can be abridged or abolished by Parliament, if it so chooses, without the aggrieved citizen having any legal recourse.

At least, that is, and this is the final irony – he has no legal recourse in Britain. There are now judicial bodies capable of overriding decisions of the British Parliament, but they are to be found on the continent: the Court of the European Community in Luxembourg, and the European Court of Human Rights in Strasbourg. In this sense Britain is clearly now less "Anglo-Saxon" than its European partners, and closer integration into western Europe is likely to strengthen rather than erode the liberties of British subjects.

Verbs, nouns, relative pronouns, adverbial clauses and all that

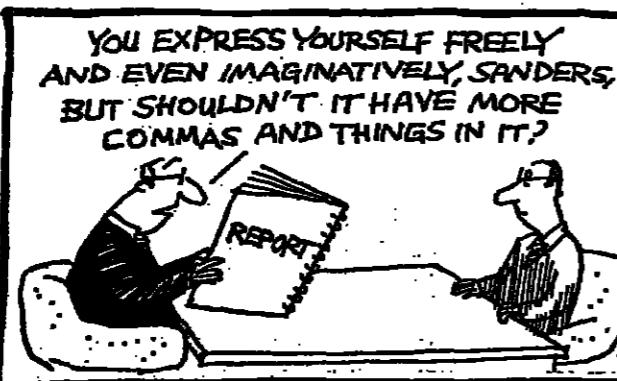
From Mr Nicholas Dale.

Sir, Although I have not read the full report of the English working party, chaired by Professor Brian Cox, which covers the teaching of English in schools, I should nevertheless like to make a few observations. It seems that the report gives little credence to the teaching of grammar, but emphasises free expression – whatever the results of that may be.

I went to a London "grammar" school between 1964 and 1971. It actually taught me about such weird and wonderful things as verbs, nouns, relative pronouns and even adverbial clauses.

All pretty esoteric stuff and, I must agree, "mostly mechanical" and not particularly interesting. Nevertheless I suppose now (at the ripe old age of 38) that it helped me to write those traditional essays which are now overrated, and helps me now in writing a report which begins at the right place, has a middle, and tries not to confuse it with the conclusion.

When it comes to dialects, I



would be one of the first to make encouraging noises in retaining them. However, whether you are a London "Cockney," coming from within earshot of Bow Bells, or a "Geordie" from Newcastle, in the north east of England, you need a standard means of communicating in written form.

The standard means of communicating in writing in the British Isles is English. Because the English which is allowed to develop by the London Cockney is likely to be different from that as developed

by the north eastern Geordie, the two may end up writing an English rather different from each other. I am very much in favour of language evolving or growing, but the parameters have to be set.

I have now been living and working in Zurich, the German speaking part of Switzerland, for the past seven years. It is interesting to note that in 60 per cent of Swiss the common written language is high German – but within that 60 per cent there are numerous dialects.

Nicholas Dale,
8142 Uetikon,
Almendstrasse 10B,
Zurich,
Switzerland.

academics may not be easy to find

to do this in the US, determined eventually to return home. I now have to decide whether to continue my study in the US will be less likely to return to Britain – having settled in another country and accustomed themselves to universities which pay good salaries, little funding and no tenure or prospect of it for new appointments.

My wish to be in Britain will probably win over my commitment to scholarship, and cause

me to leave academia. Those who continue graduate study in the US will be less likely to return to Britain – having settled in another country and accustomed themselves to universities which pay good salaries, little funding and no tenure or prospect of it for new appointments.

Before too long, however, these may well be the main group of "British" academics.

British by birth and education to the age of 21, but not by

value of the future additional earnings of the new group. As such it is extremely pure (discounted earnings only) and, as those earnings come through over the subsequent years, it is correct to write off that element of goodwill through the profit and loss account, because the earnings which are flowing have already been paid for.

Comments on the ASC has

been forced to rethink its pro-

posals on such things as off-

balance sheet finance are mis-

placed: it is simply that due

process sometimes takes time.

Philip Gibbs,
11 Alexander's Lane & Cricklade,
Piercy House,
7 Capital Avenue, EC2

Goodwill over a period are often disputed, but there is one element in the goodwill which arises on a takeover which it is absolutely necessary to write off through the profit and loss account. Before a takeover, and assuming the shares are efficiently priced, the company taken over may have stood at a price which represents a degree of goodwill over its asset value. The takeover price is normally higher still, and this extra premium represents some or all of the benefits of the merger; the evidence is that a good proportion of the value of these benefits is extracted by the shareholders of the company taken over.

In other words, this second element of goodwill (the difference between the original share price and the price at which the company is taken over) is the discounted present

value of the future additional earnings of the new group. As such it is extremely pure (discounted earnings only) and, as those earnings come through over the subsequent years, it is correct to write off that element of goodwill through the profit and loss account, because the earnings which are flowing have already been paid for.

Choosing the length of time

for depreciation is bound to be

far more arbitrary than for a

tangible asset. An enormous

penalty would be imposed on

the profits of companies seek-

ing to expand by acquisition

rather than organically. The

overall result would be a gross

distortion of earnings figures.

From Mr David Damant.

Sir, Richard Waters and your Lex columnist (June 23) refer to proposals on accounting for goodwill, under discussion by the Accounting Standards Committee (ASC). Lex's comment that the writing-off of goodwill through the profit and loss account could lead to a strong re-rating of companies whose earnings are affected is not in accordance with the evidence.

As the recent London Business School report on a parallel

subject, brands, points out,

many studies have looked at

accounting information and

share price reaction. The

relationship between reported

accounting numbers and share

prices is not a mechanistic

one, that is, the market does

not take accounting numbers

at face value, but uses a broad-based information set in interpreting their information content."

If an accounting change has

no cash flow implications

(which it will not, in the case

of the goodwill changes, unless

there is a tax effect), and there

is no change in disclosure,

then there will be no effect on

share prices. The London Business School survey of analysts' and bankers' views on brands supported the other evidence.

Nevertheless, there will be

serious results from these

accounting changes in the real

economy if company manage-

ment believes that such

changes have an effect on

INTELECO-QC

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

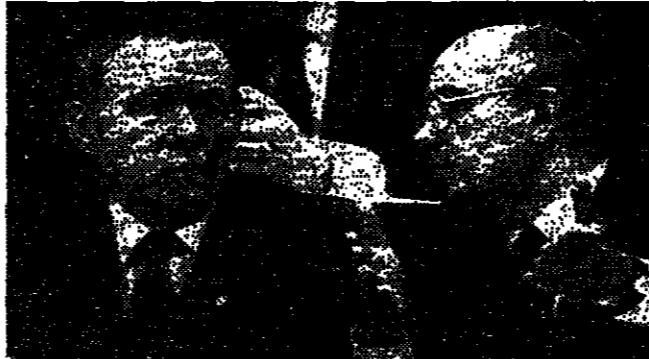
Gorbachev to visit Paris despite Gromyko's death

By Paul Winfrey in Moscow

MR ANDREI GROMYKO, 79, who served an unrivalled 38 years as the Soviet Union's Foreign Minister, died in Moscow on Sunday after a short illness.

His death, which was announced by President Mikhail Gorbachev at a session of the Supreme Soviet yesterday, failed to disrupt Mr Gorbachev's scheduled three-day visit to France, which begins today.

The Soviet Prime Minister, Mr Nikolai Ryzhkov, who will preside over the funeral, told journalists that Mr Gromyko would be interred in Moscow's Novodevichy cemetery tomorrow, and not in the Kremlin wall as had been speculated earlier.



A youthful Andrei Gromyko (far left) steps out for Buckingham Palace in 1953 as the new ambassador to Britain. Nine years later (centre) with Khrushchev at the United Nations in New York. And last year with President Mikhail Gorbachev.

A burial in the Kremlin wall, reserved for top leaders including Josef Stalin and Leonid Brezhnev, would have been a full-scale state occasion whereas Mr Gromyko's burial at Novodevichy, in the grounds of an ancient monastery, suggests that the funeral will be more of a family affair with only a few senior leaders present.

After helping to promote Mr Gorbachev to the post of General Secretary in 1985, Mr Gromyko was promoted to the largely ceremonial post of President, allowing Mr Gorbachev to take control of foreign policy. Last September, Mr Gromyko was forced into retirement so Mr Gorbachev could add the post of President to his portfolio.

Although Mr Gromyko played an important role in Mr Gorbachev's promotion he had recently begun to show concern over his reforms. In May, Mr Gromyko wrote a magazine article in which he cautioned against abandoning the collective farming system, suggested that recent cuts in the defence budget might be going too fast and criticised the press for focusing too much on Stalin's crimes.

In April Mr Gromyko was unceremoniously dropped from the party's ruling Central Committee, along with 109 other ageing members. Whatever support he may have shown for Mr Gorbachev in the early days, Mr Gromyko's style and substance could not have

been further removed from the new direction of Soviet foreign policy.

Nicknamed 'Mr Nyet' after he cast 25 'no' votes in the United Nations security council in the 1950s, Mr Gromyko was once described by Soviet leader Nikita Khrushchev, who appointed him to the post of foreign minister in 1957, as the ultimate public servant who would drop his pants and sit on a block of ice if his superiors asked him.

Under the leadership of Mr Edward Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.



THE LEX COLUMN

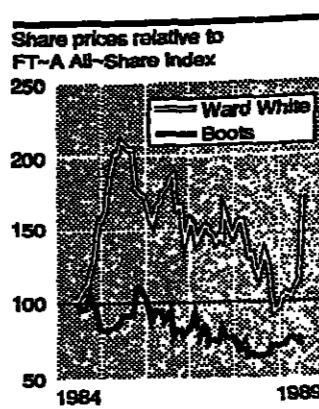
Boots prescribes some DIY

On one crude measure, the market disapproves of a Boots/Ward White merger: in the course of yesterday's trading, the combined value of the two companies fell by £5m. There is no question that the bid is an extraordinary volte-face for Boots, whose recent market revival has rested chiefly on its exploitation of existing assets. At this stage in its development, with net cash at £200m and rising, Boots is bound to feel vulnerable. It is not alone in feeling that pharmaceutical companies are too expensive to buy; it is not alone that shareholders' money is best employed in a sideways lunge into DIY.

Granted, the DIY business comes as part of a package which includes the well-attended Halfords. And indeed, the chaos in the DIY market might suggest that this is the time to get in cheaply. The case is that while Boots claims to be able to fill a gap in Ward White's strategic thinking, it has to concede not only that the businesses are tightly run, but that there is little or no overlap with Boots' own operations.

Indeed, if the plan is to reposition the DIY business and increase its capital expenditure, there may be awkward implications for Boots' earnings in the medium term.

Of course, it may not come to that. In pushing the Ward



White, at least, seems to go along with the consolidation argument, judging from PepsiCo's almost unchanged share price yesterday. BSN's price rose sharply; but that will have been mostly relief from worries about a rights issue.

Consumer spending

There is still a possibility that the latest surge in UK retail sales is an aberration, or can be blamed on the freak good weather in May. However, there must now be a worry that the shock effects of the Government's high interest rate tactics are beginning to wear off, and that consumers are off again on another borrowing binge. The latest UK consumer credit figures point in this direction: and the 4 per cent growth in retail sales in the latest three months, compared with a year ago, is in stark contrast to the US, where retail sales are now declining in real terms.

There is yesterday's results from First National Finance Corporation, one of the biggest players in the consumer lending sector, which show lending for home improvement and debt consolidation are still growing by around 15 per cent per annum — or more than twice as fast as the core rate of

inflation — and there is plenty of room for concern. The official line is that since 85 per cent of total household debt is accounted for by mortgages, there is no real reason to worry about the growth in other types of consumer lending.

However, this is far too sanguine a view, especially if these sources of credit are proved responsible for maintaining a growth in UK consumer spending which is hindering an improvement in the trade balance. The pressure for yet higher mortgage rates is growing, but an overheated housing market is no longer the major problem.

Plessey

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

Under the leadership of Mr Edward Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

It is hard to quarrel with the market's reaction to a weekend of what appeared inspired by Soviet Foreign Minister Shevardnadze, the Soviet Foreign Ministry has set about a thorough review of everything Mr Gromyko did, launching the Soviet Union on a course of 'new thinking' in foreign policy.

FINANCIAL TIMES SURVEY

A dozen nations have made nuclear power an indispensable part of their electricity supply. But others continue to resist its use, despite growing evidence that it is environmentally the least damaging source of electricity, writes David Fishlock, Science Editor

Wrestling with stagnation

NUCLEAR power is no longer seen as the panacea for the world's energy problems, as it was in the 1960s and into the 1970s. That much is plain from the latest projections of the OECD's Nuclear Energy Agency.

The output of nuclear electricity from the 24 nations of the OECD continued to increase last year, by 8.9 per cent. Ten new reactors came on-line. It now provides nearly a quarter of the electricity in OECD member-states.

But half of them still have no nuclear electricity at all, and those with it foresee only a modest expansion by 2000, with the exception of Belgium and Japan. The agency expects a further small increase overall, to 23.8 per cent by 1990, but thereafter a slow decline, to 22.7 per cent by 2000 and 21.8 per cent by 2005.

For the world's nuclear industries this picture presents problems. The nations which have pinned their faith most heavily on nuclear power are nearing completion of their initial programmes. In 1988, France generated almost 70 per cent of its electricity from its 55 reactors (54,000 MW of capacity), and the US, 19.5 per cent of its electricity from 110 reactors (102,000 MW).



The main control panel at the No 1 reactor at Kashiwazaki Kariba nuclear power station, Japan

Ashley Ashwood

World Nuclear Industries

Hopes once entertained by these two nations – and others – that their manufacturing industries would remain well occupied fulfilling the nuclear needs of others have not been realised. The situation is summarised in the words "widespread stagnation" heading a survey of world prospects for nuclear construction published by the Nuclear Engineering International journal last month. It concludes that the Soviet accident at Chernobyl in 1986 has cast a long shadow, while the wide variation in economic performance of reactors is an unconvincing counter to the prevailing apprehension.

One need look no further than the UK to see the economic variability. In the past year British utilities have commissioned new advanced gas-cooled reactors at Torness and Heysham whose performance in speedily rising to full power and remaining there stands comparison with any worldwide. But the same industry still suffers the agonies of AGRs ordered two decades ago which still seriously underperform and in some cases may never perform well.

Some nations transmit anomalous signals. Sweden gets nearly half its electricity from a dozen reactors, and has one of the best records for nuclear performance, yet insists that it will abandon nuclear power by 2010 even though it has no competitive replacement power to offer.

The best reactor performance last year came from an American pressurised water reactor, St Lucie, with a load factor of 98.7 per cent. Callaway 1, on which Britain's Sizewell B programme is modelled, turned in 89.7 per cent, Britain's best. Hinkley A, a first-generation Magnox reactor, reported 87.9 per cent.

But the top 10 nuclear electricity producers in the western world consist of four German, five US and one Belgian reactors, all up and running for over 10 years. The leader, Biblis A, a 1,200 MW PWR built by Kraftwerk Union, is the first to exceed 100 terawatt-hour (million hour) of electricity production.

After 15 nuclear "initiatives" – local referenda inspired by anti-nuclear organisations in the US – had all failed to produce a vote in favour of closing

a nuclear plant, the 16th succeeded in Sacramento, California, last month. The 970 MW Rancho Seco plant, running since 1974, has a long record of under-performing as well as a bad record of being faulted by government nuclear inspectors.

The problem, and the real danger to the credibility of the US nuclear industry, of this bad apple had been foreseen. Duke Power, a utility on the other side of the country with an excellent record in running its own seven reactors, even offered to operate Rancho Seco for its owners. They failed to grasp the helping hand.

The UK electricity industry, for the past 15 months, has been wrestling with the problem of nuclear credibility in a particularly transparent situation. The government wishes to privatisate the industry, and still suffers the agonies of AGRs ordered two decades ago which still seriously underperform and in some cases may never perform well.

Some nations transmit anomalous signals. Sweden gets nearly half its electricity

from a dozen reactors, and has one of the best records for nuclear performance, yet insists that it will abandon nuclear power by 2010 even though it has no competitive replacement power to offer.

The best reactor performance last year came from an American pressurised water reactor, St Lucie, with a load factor of 98.7 per cent. Callaway 1, on which Britain's Sizewell B programme is modelled, turned in 89.7 per cent, Britain's best. Hinkley A, a first-generation Magnox reactor, reported 87.9 per cent.

But the top 10 nuclear electricity producers in the western world consist of four German, five US and one Belgian reactors, all up and running for over 10 years. The leader, Biblis A, a 1,200 MW PWR built by Kraftwerk Union, is the first to exceed 100 terawatt-hour (million hour) of electricity production.

After 15 nuclear "initiatives" – local referenda inspired by anti-nuclear organisations in the US – had all failed to produce a vote in favour of closing

a nuclear plant, the 16th succeeded in Sacramento, California, last month. The 970 MW Rancho Seco plant, running since 1974, has a long record of under-performing as well as a bad record of being faulted by government nuclear inspectors.

The problem, and the real danger to the credibility of the US nuclear industry, of this bad apple had been foreseen. Duke Power, a utility on the other side of the country with an excellent record in running its own seven reactors, even offered to operate Rancho Seco for its owners. They failed to grasp the helping hand.

The UK electricity industry, for the past 15 months, has been wrestling with the problem of nuclear credibility in a particularly transparent situation. The government wishes to privatisate the industry, and still suffers the agonies of AGRs ordered two decades ago which still seriously underperform and in some cases may never perform well.

Some nations transmit anomalous signals. Sweden gets nearly half its electricity

from a dozen reactors, and has one of the best records for nuclear performance, yet insists that it will abandon nuclear power by 2010 even though it has no competitive replacement power to offer.

The best reactor performance last year came from an American pressurised water reactor, St Lucie, with a load factor of 98.7 per cent. Callaway 1, on which Britain's Sizewell B programme is modelled, turned in 89.7 per cent, Britain's best. Hinkley A, a first-generation Magnox reactor, reported 87.9 per cent.

But the top 10 nuclear electricity producers in the western world consist of four German, five US and one Belgian reactors, all up and running for over 10 years. The leader, Biblis A, a 1,200 MW PWR built by Kraftwerk Union, is the first to exceed 100 terawatt-hour (million hour) of electricity production.

After 15 nuclear "initiatives" – local referenda inspired by anti-nuclear organisations in the US – had all failed to produce a vote in favour of closing

CONTENTS

Politics of waste disposal	2
Nuclear economics	2
Britain's nuclear programme	3
France	3
Japan; United States	4
West Germany	5
Brazil; Argentina	5
Sweden; Canada	6
Nuclear technologies:	
Nuclear fuel	
Reprocessing of spent fuel	
Radioactive waste treatment	7
Fast reactors; Advanced reactors	
Post-Chernobyl	8

Evidence that there is a widespread public yearning for a form of nuclear power perceived as clean and safe appeared unexpectedly this spring, with the unprecedented display of interest worldwide in claims for "cold fusion". For some years past fusion power has been failing conspicuously to live up to earlier expectation as either an economic or clean new energy source. One US industry study even concluded that, when finally realised, fusion would best be used to make fuel for fission reactors.

Then in March two chemists challenged all conventional wisdom by claiming to have seen fusion in an electrochemical cell. Today they are probably the world's best-known scientists. Sadly, they seem to be wrong.

For the nuclear industries the strategic challenge must be to fulfil this latent public desire for clean and cheap energy, not by making unsubstantiated claims, but by consistent and ever-improving performance from the investment already made in more than 300 power reactors capable of generating nearly 330,000MW. The signing in May of a treaty pledging all the world's nuclear utilities to back the cause of better and safer nuclear performance, through the World Association of Nuclear Operators, could be a turning point for the industry.

Nuclear statistics do not lie when they say that nuclear energy is already the safest large-scale source of energy known to man, for its own employees as well as for the public at large. Not only does it contribute little or nothing to the radiation exposure of people generally, it also offers 330,000MW of power in the western world that contribute nothing to the potential risk of overheating the planet through the "greenhouse effect".

Once these two facts are more widely accepted, the market for nuclear reactors will surely return.

We're building a channel tunnel 400 miles north of Dover.

A major development on the scale of the channel tunnel or North Sea oil.

That's what's happening at British Nuclear Fuels, Sellafield in West Cumbria.

It includes the Thermal Oxide Reprocessing Plant (THORP), one of Europe's largest construction projects.

Behind the development lies a huge £5 billion company-wide investment programme over the next ten years.

And the expertise of the world's most experienced company in nuclear fuel manufacture, uranium enrichment, spent fuel transport, reprocessing and waste management.

It's a clear indication of our confidence in the nuclear future.

The company has a customer base of fifty utilities worldwide and collaborative links with American, West German, Dutch and Japanese companies. THORP, due to come on-stream in 1992, already has a

£4 billion order book, two-thirds of which are export earnings. British Nuclear Fuels,

building today a resource that will deliver an economic, efficient nuclear fuel cycle

service to the year 2000 – and beyond.

British Nuclear Fuels plc,
Risley, Warrington, Cheshire. WA3 6AS.

WORLD NUCLEAR INDUSTRIES 2

Politics of waste disposal

Nirex's search for a peaceful resting place

"THEY don't know what to do with the waste" is probably the most frequent objection raised nowadays to nuclear power. Technically, it is simply not true. The nuclear industry probably has a better understanding of its waste management problems than any other industry. But as Mr Neville Chamberlain, British Nuclear Fuels' chief executive, puts it: "We cannot build a waste repository until society determines where it should be."

Opponents of the industry recognise that their strongest card is to ensure that the industry never gets permanent repositories, so that they can continue to claim that it "doesn't know what to do with its waste".

Nuclear critics
recognise that their strongest card is to ensure that the industry never gets permanent repositories, so that they can continue to claim that it "doesn't know what to do with its waste".

So opponents insist that the radioactive waste must be kept in surface stores, in close proximity to the nuclear activities that generate it, and not be placed permanently behind engineered barriers away from the public as common sense suggests. Even at Sellafield, Cumbria, where most of Britain's radioactive waste accumulates and which is probably the most tolerant UK community towards the nuclear industry, the proliferation of radwaste stores has begun to cause local disquiet.

The issue came into sharper focus for industry and government in the UK with an investi-

gation of radioactive waste management by a parliamentary select committee in 1986. This report exposed the conflict between proponents and opponents of nuclear power. It accepted the logic of permanent disposal but called for a "Rolls-Royce" approach to engineering standards of waste containment.

The Department of the Environment subsequently translated this into a requirement that no member of the public should be exposed to a radiation dose exceeding 0.1 milli-Sievert a year from radwaste.

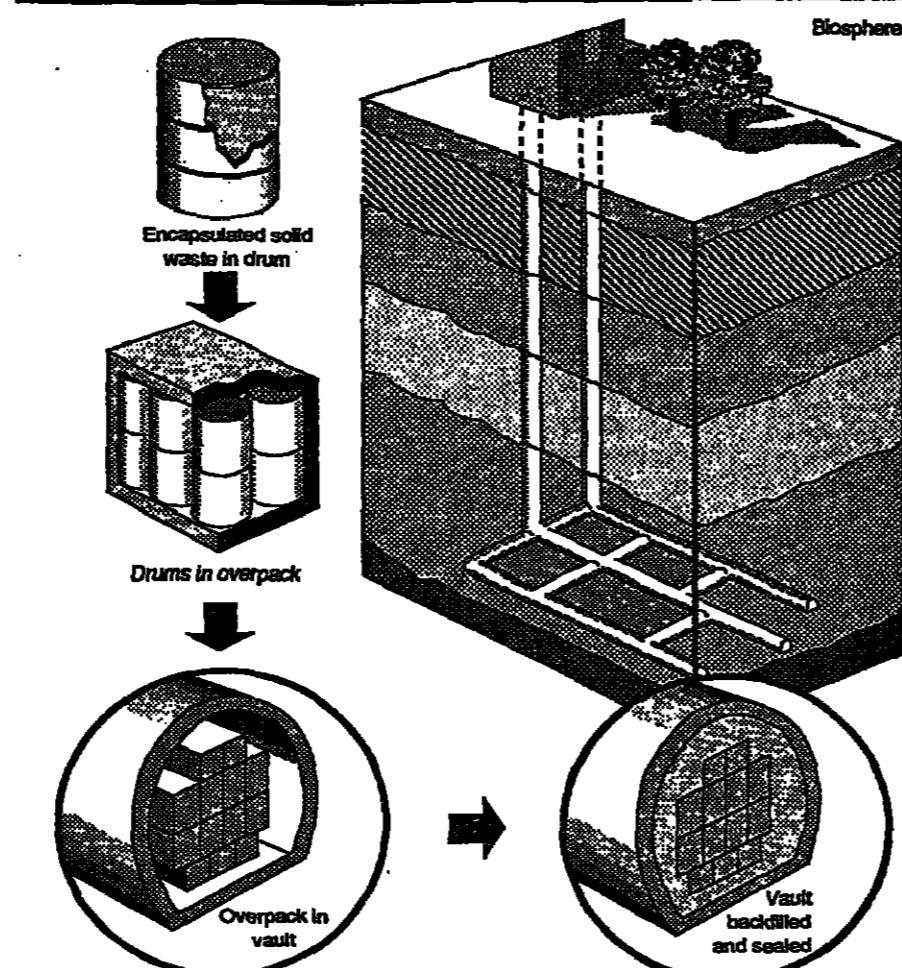
To put this dose limit into perspective, the average exposure per Briton is 25 times as much, mostly from natural radiation such as radon seeping from the ground and cosmic rays from outer space. The National Radiological Protection Board warned government earlier this year that some Britons are being exposed to 20-100 mSv a year from radon alone.

Nevertheless, UK Nirex, the body authorised by government to manage radwaste, has drafted a scheme it believes will meet the standard. It abandoned earlier ideas of separate repositories for low-level and intermediate-level radwaste, and now proposes a single subterranean repository capable of accommodating 1.3m cu metres of waste of both kinds, already accumulated and expected to accumulate over the next 40-50 years.

This is the volume of coal Britain mines in just six days. Nirex claims it is only 1.1 per cent of the total volume of toxic waste Britain will generate over this period.

To achieve the degree of radiological protection stipulated, UK Nirex has adopted the multi-barrier approach illustrated in the accompanying diagram. First, the radwaste will be encapsulated in cement or bitumen, in steel drums. These drums, in turn, will be sealed in a concrete-and-steel "overpack". Then the overpacks will be stacked in

The Multi-Barrier approach to deep disposal



PAUL SAUNDERS

concrete-lined vaults.

Eventually, the industry hopes these vaults will be sealed permanently. But for the present it is assuming that the government will want the waste packages to remain retrievable. It calls it the "managed, monitored, retrievable" approach, and the radwaste will remain retrievable until the safety of the disposal route has been demonstrated to the public's satisfaction.

Nirex acknowledges that the concepts embodied in such a repository are already being tested elsewhere in Europe. Much of this research has been supported by the European Community, now on its third five-year R and D programme into radwaste disposal.

Sweden, for example, with Europe's most advanced radwaste disposal programme, is completing a sub-sea repository at Forsmark north of

Stockholm, which has been receiving radwaste for the past 15 months. It is stored in silos 60 metres beneath the sea and 1 km offshore. Next year the Swedish Nuclear Fuel and Waste Management Company (SKB) plans to start excavating a repository for low and intermediate-level wastes. It intends to begin the conversion in the early 1990s, for completion around the turn of the century.

A separate repository is planned for a salt deposit at Gorleben, for highly radioactive, heat-generating wastes. The Dutch are also exploring salt formations in their OPLA programme. France plans to have the first stage of a deep repository in service by 2000.

UK Nirex has identified two locations where a deep repository appears to be both geologically feasible and socially acceptable. They are Sellafield, Cumbria, centre of commercial reprocessing and therefore the source of much British radwaste; and Dounreay in Caithness, seeking a new mission.

For each there is the attraction of a project Mr Tom McInerney, Nirex's managing director, likens in scale to the Channel Tunnel, with employment "in perpetuity" for about 350 staff. Test boring of the Sellafield site has already started. Other things being equal, logistics must favour Sellafield where it may be possible to take conditioned and packaged radwaste straight into the repository without passing into the public domain.

But Mr McInerney believes it unlikely that Nirex will have the government's permission to start excavating on either site before the mid-1990s. He forecasts that Britain's first repository will enter service around 2005.

David Fleck

As a result of increased safety and construction costs, much more strident public opposition, a tougher attitude to capital recovery by state regulatory commissions and the consequences of bad management, less than half the projects under way or on the order books in the US 15 years ago will be completed.

And as Mr Gilinsky said: "Although the US nuclear generating capacity is larger than those of France and Japan combined, US nuclear construction is essentially over."

Few in the US now disagree that nuclear power is likely to prove too expensive, not just against its traditional competi-

tor, coal, but against the the newer combined cycle gas turbines which can offer high thermal efficiencies as well as lower capital costs, and the flexibility of smaller units.

Comparisons of the true economic competitiveness of US nuclear plant is notoriously difficult, partly because of the great range of capital costs and partly because of the peculiar accounting and regulatory systems used by US utilities.

However, the Paris-based International Energy Agency estimated in 1986 that coal-fired plant could have a 25 per cent overall cost advantage over nuclear in the Rocky Mountain region, and would be

NUCLEAR ECONOMICS

Brave new world wakes up to financial reality

ector, coal, but against the the newer combined cycle gas turbines which can offer high thermal efficiencies as well as lower capital costs, and the flexibility of smaller units.

Comparisons of the true economic competitiveness of US nuclear plant is notoriously difficult, partly because of the great range of capital costs and partly because of the peculiar accounting and regulatory systems used by US utilities.

However, the Paris-based International Energy Agency estimated in 1986 that coal-fired plant could have a 25 per cent overall cost advantage over nuclear in the Rocky Mountain region, and would be

After many setbacks, 'US nuclear construction is essentially over'

roughly level with coal plant in the central and eastern parts. However this assumes only a 5 per cent real rate of return on capital, which in view of the regulators and other risks, most US utilities would consider much too low.

For all the developed countries, the IEA figures suggest that the capital costs of new nuclear plants is about 75 per cent more than for a large coal-fired plant of equivalent size, but the fuel costs are only about a third as much.

Since these figures were first published, many experts have run them through the mill of sensitivity analyses, asking the crucial question as to how nuclear competitiveness stands up to changed assumptions about future construction costs, a different cost of capital (discount rate), different estimates of the lives of power stations or relative changes in the cost of coal and the nuclear fuel cycle.

Mr Victor Gilinsky, the former US nuclear regulator, described at a London conference last year the rapid scaling up of plant from the early 200 MW units to 1,000MW and commented drily: "There were

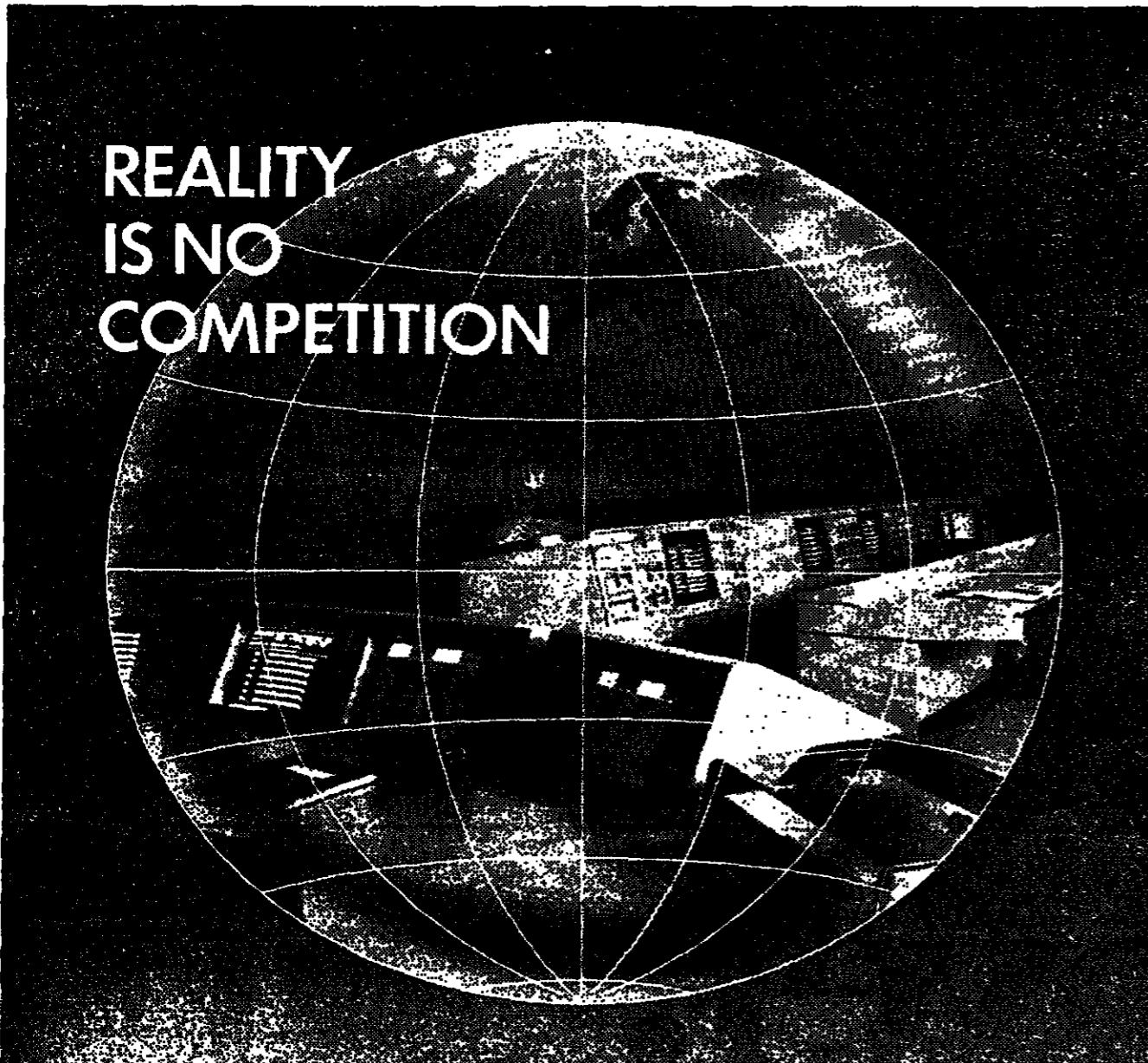
so many caution lights that it is an open question whether even France's nuclear programme will turn out to have been such a good buy

tem which already has surplus capacity, although in a free market, the potential for exporting cheap nuclear power to other European countries might justify the continued building of plant.

It is an open question, therefore, whether, considered as a totality, even France's nuclear programme will turn out to have been such a good buy as is sometimes claimed. A more balanced programme, with a different mix of plant and lower debt might in the longer term have proved to be in the best interest of consumers.

If it is a balance which in different ways, Japan, West Germany and the UK will need to assess very carefully, even before giving weight to the pressures of environmental lobbies. If for the nuclear age is now passing into maturity, that means the scientific vision of a brave new world must be subsumed into the clicking of an accountant's calculator.

Max Wilkinson



A FULL RANGE OF POWER PLANT TRAINING SIMULATORS

- Superior Training Environment
- Enhancement of Operational Experience
- Optimisation of Skills
- Reduction of Risk
- Minimisation of Costs
- Increase of Trainee Throughput

KRUPP ATLAS ELEKTRONIK

A Sound Decision

For further information please contact:

KRUPP ATLAS ELEKTRONIK GMBH - P.O.BOX 448545 - D-2800 BREMEN - FRG - TELEPHONE (49/421) 457-3339 - TELEX 24574641

METRONEX

The Polish Nuclear Equipment Establishment POLON offers a variety of nuclear equipment and instrumentation units from the following groups:

- Ionizing Radiation Measuring Instruments.
- Modular Electronic Instrumentation Systems based on CAMAC and Multibus II standards.
- Nuclear Power Plants Monitoring and Control Systems
- Industrial Equipment and Instruments

Head Office: 00-901 Warsaw, POLAND
Palac Kultury i Nauki XI p.
Tel: 26-87-83 Telex: 813 232

Exporter: METRONEX Ltd.
FOREIGN TRADE ENTERPRISE
Mysia 2, 00-950 Warsaw,
POLAND
P.O. Box 188
Telex: 814 471 Tel: 683-1000

JOINT RESEARCH CENTRE

COMMISSION OF THE EUROPEAN COMMUNITIES

Science and Technology in the Service of Europe

Areas of Expertise:

- Nuclear Safety
- Reference Measurements and Materials
- Advanced Materials
- Reliability of Structures
- Environment
- Earth Observation by Remote Sensing
- Fluid Dynamics, Heat Transfer and Industrial Safety
- Knowledge Engineering and Technological Forecasting

Availability of Specialized Facilities, including:

- Multipurpose High Flux Reactor

Opportunities for Industry in:

- Contract Research
- Collaborative Research
- Licensing

For further information, please contact:

Directorate-General of the Joint Research Centre
200, rue de la Loi, B - 1049 Brussels, Belgium
Phone +32 235 85 27 - Telex +32 235 01 46
Telex 21 877 COMEX B

WORLD NUCLEAR INDUSTRIES 3

UNITED KINGDOM

A club back in fashion

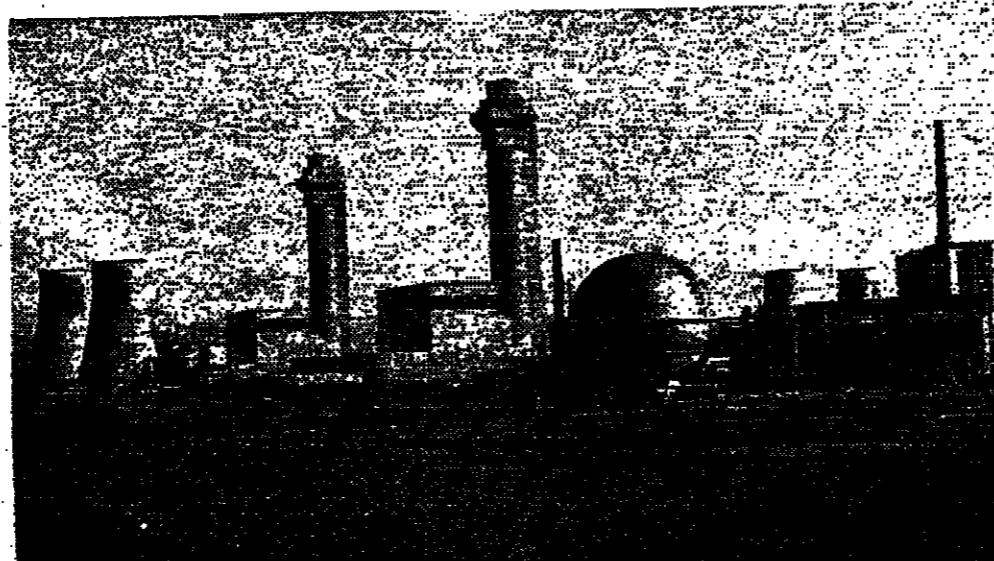
THE "international club" approach to developing the nuclear industry, briefly fashionable in Britain before the "energy crisis" of the early 1970s, shows clear signs of returning to favour in the 1980s.

This year alone, UK nuclear companies have made a bid for nuclear development cash from the US Department of Energy, announced participation in a \$750m US joint enrichment venture, made a bid for a stake in West German fuel fabrication, and signed the European Fast Reactor agreement.

The new climate dates from the decision, finally taken by the Government little more than two years ago, to abandon the British line of gas-cooled reactor development and join the mainstream of thermal reactor technology by licensing the Westinghouse pressurised water reactor. It opened fresh opportunities for British companies to compete in world markets for PWR fuel, components, and specialised services such as safety validation and in-service inspection.

A year later the Government announced plans for privatising the electricity supply industry. The entire nuclear capacity and support structure of the Central Electricity Generating Board, including the newly-begun Sizewell B PWR and plans to replicate it several times, has been assigned to National Power, comprising 70 per cent of existing capacity. It leaves Power Generation, representing the other 30 per cent, initially dependent on elderly coal-fired stations. It also leaves risk that nuclear power, in the hands of one company and further protected by the government's stipulation of a 20 per cent non-fossil component of national electricity, could become a cost-plus activity.

PowerGen and other private generators after privatisation have won from government the freedom to invest in nuclear power. This opened the way for a new kind of reactor, invented last year by the UK Atomic Energy Authority in partnership with Rolls-Royce and Associates. SIR, the safe integral reactor, backed by two leading US nuclear engineering



Sellafield, Cumbria: where most of Britain's radioactive waste accumulates

groups, Combustion Engineering and Stone and Webster, is seeking \$50m (320m) of support for design and development from the US Government, under its scheme for promoting safer and cheaper nuclear systems.

For National Power, the 320MW SIR is simply an unwanted distraction from all the manifold problems of building a series of big PWRs on time and to cost by 2000. For its competitors - PowerGen and the electricity boards - SIR could be the way to compete against big PWRs in the non-fossil sector.

Mr John Harris, chairman of East Midlands Electricity and also chairman of the fiction committee set up by the 12 electricity boards, says he has been persuaded of the potential merits of a small, factory-built reactor, and has helped persuade several other electricity boards to back the submission of SIR for US funding.

Mr James Stevens, chairman of the British Nuclear Forum, says these boards "bring a freshness of thought that the nuclear industry ought to welcome". With PowerGen, Rolls-Royce and the UK AEA, the boards have mustered pledges of another £30m to meet design and development costs.

Last month a new US nuclear consortium, Louisiana Energy Services, announced plans to build the first private uranium enrichment facility in the US. The consortium comprises three US utilities (Duke Power, Northern States Power and Louisiana Power and Light), the US engineering group Fluor Daniel, and the Anglo-German-Dutch enrichment group Urenco. The US facility will use Urenco gas centrifuge technology.

The three European governments have approved the transfer of technology to the US. Urenco will supply the gas centrifuges - more than half the cost of the investment - and Urenco will have a shareholding in the plant. Its capacity when on-stream in 1990 will be 15 per cent of the enrichment demand of the US, a country which once sought to monopolise supplies of enrichment to the western world. At

current enrichment prices, the plant will have a turnover of about £100m a year.

Urenco was the first and is the most successful of Britain's international nuclear ventures. The spirit is captured in the way the three partners adopted the nickname "strike", originally a somewhat sceptical joke. The partners are the state-owned British Nuclear Fuels, the privately-owned Urenco consortium in West Germany, and the mainly

The new climate has opened the door for UK companies to compete in world markets for PWR fuel, components and specialised services

state-owned Ultracentrifuge in the Netherlands.

For nearly 20 years, Urenco has pooled its research and development to arrive at a single centrifuge technology, unique to the group, now used in enrichment plants in each country. Its fourth plant, using the latest technology, will be in Louisiana.

A key figure in negotiating the project has been Senator Bennett Johnson of Louisiana, chairman of the Senate energy committee, who has hailed it as a "monumental victory" for his oil-based state in attracting new high-technology industry. It will compete with the US Government enrichment monopoly, because it uses only about 4 per cent of the energy of the enrichment process, Urenco claims.

BNFL sees Urenco as the model for other international operations in nuclear fuel, for example, in reprocessing and fuel fabrication. Urenco's first plants in the 1970s were built only in Britain and the Netherlands, to avoid political repercussions from having enrichment in West Germany.

Today for political reasons Germany wants to avoid doing its own reprocessing. Britain is negotiating with the German electricity industry to undertake the reprocessing of some 4,000 tonnes of spent fuel from 2002, in a deal that will give BNFL the opportunity to enter the European market for recycled light water reactor fuel.

There is growing interest among many European utilities in recycling not only uranium but plutonium recovered through reprocessing. BNFL has considerable experience in these areas. "If that's part of the nuclear fuel cycle market we want to be in it," says Mr Neville Chamberlain, BNFL's chief executive. He claims the gas centrifuge has clear advantages over rival enrichment capacity for re-enriching recycled uranium.

International ownership is the future of the whole nuclear cycle, Mr Chamberlain believes. The way for Germany's industry to remain in the fuel cycle is for it to buy a stake in plants in other countries, as it did with enrichment. BNFL wants to see Germany remain in the fuel cycle. "The time may come when it is easier to build an international fuel facility in Germany than in the UK," he says.

Nowhere, however, are the advantages of international collaboration more clearly recognised at present than for

the survival of the fast reactor in Europe. Britain itself faces a cutback to about 10 per cent of today's budget over the next few years.

Europe is spending about £300m a year on the technology, mainly in Britain, France and Germany. About £175m goes into operating prototype and demonstration facilities. The remaining £125m is supporting research, development and design for a single objective, the European Fast Reactor (EPR). A club of electricity companies called the European Fast Reactor Utilities Group (EPRUG) has commissioned a joint attempt to design EPR as a commercial reactor acceptable to licensing authorities throughout Europe, and competitive in costs with light water reactors.

Britain formally became part of the EPR project in February when the three partners signed a series of fast reactor agreements covering a unified R and D programme, a co-ordinated design team, and the sharing of intellectual property rights. The National Nuclear Corporation (a GEC subsidiary), Intertec (Siemens) and Framatome (Framatome) have between them some 250 engineers engaged on EPR design.

The big test for EPR comes next year when EPRUG, as patron, will review progress towards meeting some very demanding objectives. If EPR passes this test, it may move from the network of committees now co-ordinating the project, to a fully integrated management structure capable of building the first EPR.

David Fishlock

FRANCE

Bleak times ahead

NO country has pursued the nuclear option with such unswerving determination as France. Not only has it developed an industry capable of handling every aspect of the nuclear cycle, but it is second only to the US in its nuclear-based generating capacity.

Yet just when it has virtually completed its equipment programme, France faces fresh problems: oil prices have slumped, confidence in nuclear has been shaken by Chernobyl, one country after another has frozen its nuclear programme and even France now faces a significant electricity surplus.

Few people in France question the country's decision to give nuclear energy such priority. With virtually no oil, gas or coal resources of its own, nuclear was the only way France could reduce its dependence on outside suppliers.

Planners admit that too many plants have been built, but they consider this is a temporary problem. In their view, the problem is just one of maintaining France's technological and industrial capacities during the lean years ahead. This is the lesson that Mr Philippe Rouvillois, former French railways chairman, will be examining in a report which was recently commissioned by the French government.

France's nuclear programme has been pursued with almost military precision. The driving force from a research point of view was the Commissariat à l'Energie Atomique (CEA) which developed France's "force de frappe", but in the end CEA's graphite-gas technology was abandoned in favour of the pressurised water reactor (PWR) technology developed by Westinghouse.

While the state-owned utility Electricité de France (EDF) assumed overall responsibility for the programme, Framatome was selected as the exclusive supplier of the reactors and Alsthom (Compagnie Générale d'Électricité) of the turbine generators. Cogema, the industrial subsidiary of the CEA, handled the fuel cycle. It controls some 20 per cent of the world's uranium resources, has a controlling stake in the uranium enrichment consortium Eurodif, manufactures fuel in association with Framatome and Pechiney, reprocesses spent fuel at La Hague near Cherbourg through its subsidiary

representing around 50,000 tonnes of capacity. Another three plants are due on-load this year and by 1993 57 PWRs will be in operation with a total capacity of around 60,000MW.

With the help of the Italians and the Germans, the French have also built the world's biggest demonstration fast reactor, 1,200MW at Creys-Malville in southern France.

The basic objective has been achieved. Oil and coal are hardly used any more for electricity generation. Last year nuclear and hydro accounted for 75 per cent and 21 per cent of EDF's 342bn kWh electricity production. Electricity now accounts for 37 per cent of domestic energy consumption and around half the needs of industry and households. French has reduced its dependence on energy imports to around 50 per cent from more than 75 per cent at the time of the first energy crisis.

While other countries have cut back their nuclear projects, the French have pushed ahead unperturbed. The Socialists envisaged a construction freeze in 1981, but thought better of it once they were in power. Further nuclear plants seemed necessary if France was to achieve the high growth they had promised.

As it turned out that growth was never achieved and EDF might have been better off with a freeze. For it is now reckoned that between seven and 10 plants were ordered which will not be needed and

Michael Parrott

CEGB

For the record, we've been producing nuclear power safely and successfully for over twenty-seven years.

One of our earliest reactors (a Magnox at Hinkley Point) has just achieved a world-class performance: 700 days of continuous operation.

One of our latest reactors (an AGR at Heysham) entered the world class in its run up to full design output: just 44 days. It's a record we're proud of.

WORLD NUCLEAR INDUSTRIES 4

JAPAN

Stung by Chernobyl's political fall-out

IN AOMORI Prefecture in northern Japan bulldozers have begun to level land for the most ambitious and controversial nuclear industry centre on which the country has embarked. At Rokkasho, large facilities are planned to enrich uranium for nuclear fuel, to reprocess spent fuel, and to permanently entomb wastes.

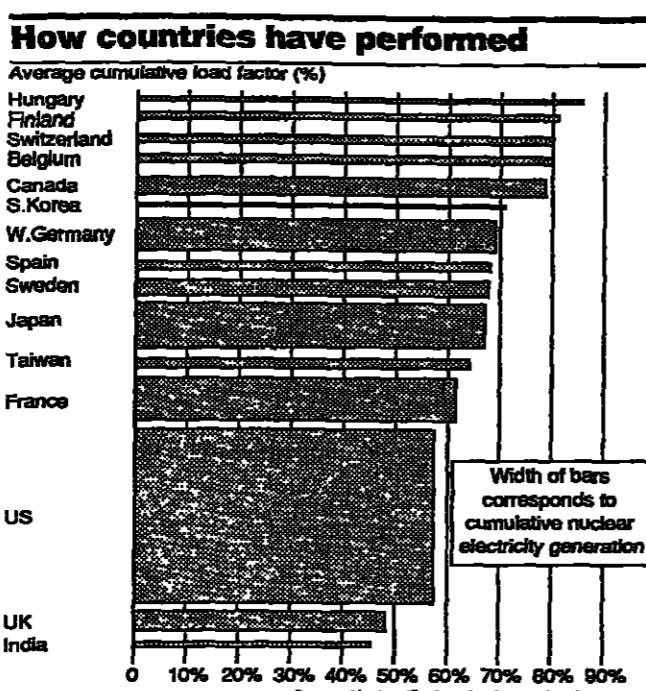
Rokkasho was once earmarked for oil industry development but this was abandoned in the 1970s, leaving only the national oil stockpile in a farm of some 400 tanks. It was re-signed for the nuclear role in 1984.

For the government, Rokkasho is a vital step in securing future energy supplies for a nation almost bereft of natural fuel. Although Japan is getting about 34 per cent of its electricity from nuclear fuel, and expects this to grow to 45 per cent by the turn of the century – it is wholly dependent on other nations for vital nuclear fuel services. Enrichment is being bought from the US (80 per cent) and France; reprocessing from Britain (50 per cent) and France.

For Aomori Prefecture, the centre spells new prosperity for an impoverished rural community. Rokkasho village itself is a tumbledown ribbon development, the most conspicuous feature of which seems to be the used car dump.

For opponents of nuclear power, the centre is a project that must be prevented because its facilities will help immeasurably to perpetuate nuclear power in Japan. It will provide plutonium fuel for the fast reactors foreseen by government as a commercial energy system early in the 21st century.

For the past year opponents have been organising protest



meetings and marches, culminating in a day of protest in Aomori City, the prefecture's capital, about 100 km from Rokkasho, to greet receipt by the government this spring of the safety case for the reprocessing plant. Proponents expect the government to take two years studying their case before they can expect the green light in 1991.

A decade of steady progress in building up nuclear capacity and public confidence in it appears to have lulled Japanese proponents of nuclear power into a belief that they were largely unopposed. The privately-owned electricity companies, which are not restricted to building reactors

within the areas they serve, simply avoided the more sensitive south with its memories of nuclear events at Hiroshima and Nagasaki. No fall-out from the Chernobyl explosion three years ago reached Japan to rekindle those fears.

But last year Japan began to experience what proponents are calling a "delayed Chernobyl reaction" – a sudden upsurge in opposition, nationwide but particularly focused on the Rokkasho project. One nuclear industry executive claims confidently that it "arrived by sea" – that it is an imported protest.

Mr Masayuki Kitamura, governor of Aomori Prefecture – about 125m people – is a fervent supporter who sees nuclear power bringing greater prosperity to a region best-known for providing half of Japan's apple harvest.

Nuclear industry investment is only one of the plans for bringing modern industry to the region. But Mr Kitamura says he has satisfied himself that it is safe.

People in the vicinity of Rokkasho are also convinced, he says. Under a national plan for electricity development, not exclusive to nuclear projects, a total of 15 nearby towns and villages will benefit directly from a fund set up by the electricity companies.

Over eight years these communities – embracing some 300,000 people – will receive a bounty totalling Y37bn (\$26.29). In addition, the two nuclear fuel companies involved at Rokkasho have set up a Y10bn trust, investment income from which will be used to improve amenities.

Mr Kitamura says his biggest problem in confronting opponents is their inflexibility. Nevertheless, he admits their arguments are finding sympathy among his constituents. Farmers have recently united in opposition to the government in general and to nuclear power in particular. They are telling housewives the food Japan imports from Europe is contaminated with radioactive fall-out from Chernobyl. People are also swayed by such arguments as the risk to Japan from Chernobyl-like accidents offshore and downwind. In reactors owned by neighbouring nations the Japanese have traditionally considered inferior, such as South Korea, Taiwan and the Philippines.

Rokkasho's plants are also scheduled for fast construction. First is the enrichment facility, planned by Japan Nuclear Fuel Industries Company, a federation of electric power companies and manufacturing groups. For Mr Hisashi Kaneda, director responsible for enrichment, the severity of safety criteria is a feature of all Japanese nuclear planning. Because of its associations with nuclear weapons – the Hiroshima atomic bomb used enriched uranium – the nuclear inspectors spent 15 months studying his safety case.

He won approval last autumn to build a facility of 1,500 tonnes annual capacity at the rate of 150 tonnes a year. His first centrifuges are due for delivery this year.

Another federation of electricity, manufacturing and finance groups called the Japan Nuclear Fuel Service Company is responsible for the reprocessing project. Its safety case for a facility to treat 800 tonnes of spent fuel annually was submitted on March 30.

Unlike the enrichment plant, a public inquiry will probably be required before it gets approval, says Mr Masayuki Toyota, the president of the federation. But unlike British public inquiries, he expects it to last only a day or two.

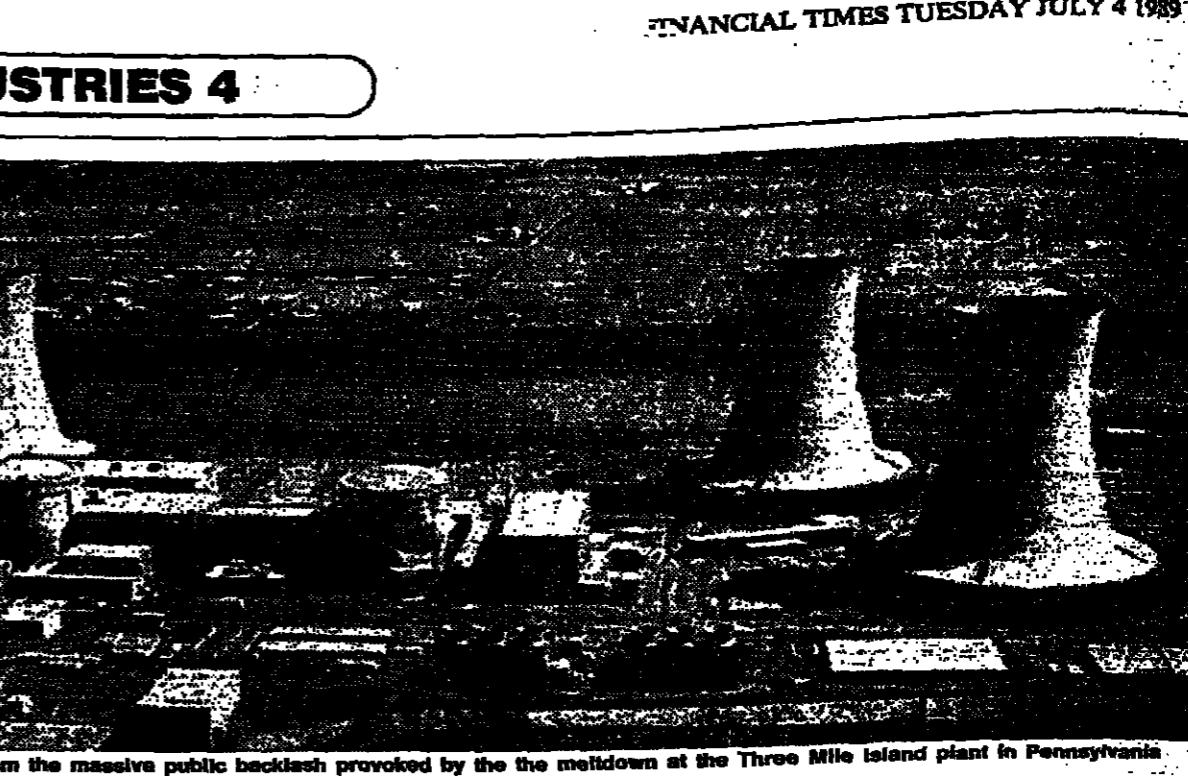
Currently, France and Britain have lucrative contracts for reprocessing all Japanese fuel. But a desire for domestic energy security has encouraged the electricity companies to fund facilities for part of their future needs.

That does not mean Japan will necessarily be renewing contracts with Cogema and British Nuclear Fuels, however. More stringent safety requirements for reprocessing and the management of radioactive wastes have forced up European reprocessing prices sharply in the 1980s, and the Japanese had signed cost-plus contracts.

The European companies hint that they will be able to cut prices dramatically – perhaps by between 40 and 50 per cent – for the second decade of operations, when the plant investment will largely be amortised. But the Japanese utilities point to the cost of transporting spent fuel to Europe and bringing back highly radioactive waste – also scheduled for safe-keeping at Rokkasho – as well as the separated plutonium.

Mr Toyota says he personally believes Japan may get better value by storing its spent fuel for a few decades. "We have nothing to lose by storing and after 30 years the cost of reprocessing may be lower."

On the other hand, any public acknowledgement that the Japanese electricity companies are cooling in their enthusiasm for reprocessing will give fresh ammunition for opponents of Rokkasho. To win and sustain public acceptance of his reprocessing project, Mr Toyota believes Japan must continue to reprocess perhaps half its spent fuel, either at home or overseas.



The US nuclear industry is still recovering from the massive public backlash provoked by the meltdown at the Three Mile Island plant in Pennsylvania

UNITED STATES

A slow turnaround

A DECADE after the Three Mile Island meltdown, the US nuclear power industry believes the tides of economics and public opinion are beginning to turn in its favour again.

Few people in the industry predict it can land soon its first new plant order since 1978. But manufacturers, operators and government are working vigorously on regulatory overhaul which could help trigger an order within the next five years.

Design work on the next generation of reactors continues and the manufacturing base has remained largely intact despite the dearth of new construction. General Electric and Westinghouse, for example, have carried out businesses servicing existing plants and finding ways to extend their lives.

The 1979 disaster at the Three Mile Island plant in Pennsylvania wrought havoc with the industry. A public backlash and massive regulatory changes dramatically worsened the economic and political picture, forcing utilities to cancel orders for more than 100 plants.

All 112 nuclear power plants operating today in the US (representing 27 per cent of the total worldwide) were ordered before 1974. They now provide nearly 20 per cent of US electric power compared with 11 per cent then. A total of 11 plants are still under construction with the last due for completion by 1991. Technically speaking, two more remain on order for Commonwealth Edison but the Chicago utility has still not applied for a construction licence.

The industry argues, however, that pressure is building for utilities to accelerate construction of new generating capacity. Economic and environmental factors will dictate a resumption of nuclear power plant building, it believes.

Utilities like to keep their total generating capacity at least 17 per cent above average demand to ensure reliable service during unusual weather, breakdowns and shutdowns for maintenance. From a recent peak of 30 per cent spare capacity in 1982, the power industry has fallen to about 15 per cent today and will drop below its comfort level as early as next year, according to the US Council on Energy Awareness, a nuclear power lobby group.

The situation is worse in the north-eastern states where the capacity margin is already down to the low teens. New England dropped to 2 per cent during peak times last year and reduced voltage is expected along the eastern seaboard this summer.

On current trends, utilities

will need to build up to 100 gigawatts of new capacity over the next decade, equal to some 200 new coal-fired plants or 100 nuclear, the council forecasts.

Concerned by deteriorating air quality and the greenhouse effect, more members of the public are changing their attitude to nuclear power. They are unenthusiastic but realistic supporters. Some 80 per cent of those surveyed earlier this year said they believed nuclear energy was important to meeting US energy demand in the years ahead, according to a poll taken for the council.

Economics remain a hurdle

for nuclear power but high costs relate largely to the very slow two-stage regulatory process, first for approval to build a plant and then to operate it. Thus interest costs can range from a half to two-thirds of the total project cost when it takes

standard designs so regulators have a basis for granting approval.

The licensing system, which was devised in the early 1950s, has proven unworkable for the 1980s, the industry said in a briefing paper to Congress this spring. It was the biggest stumbling block to new plant construction, it added.

Greater reliability is also helping to improve the case for nuclear power plants. The number of unplanned automatic shutdowns fell from an average of 7.4 per plant in 1980 to 2.7 in 1987. The industry's output was only 58 per cent of its design capacity in 1980 but rose to 65 per cent in 1988.

Some plants have remained unreliable, though, that their customers have deserted. In Sacramento, the California state capital, voters were so frustrated that in a referendum in June they voted in favour of ordering the municipal-owned nuclear power to close down permanently, which it did 24 hours later.

Anti-nuclear lobbyists have also been pointing out that key components of many nuclear plants are wearing out far quicker than expected.

The process is so slow for two main reasons. First, manufacturers and owners have been turning out custom-made plants, designing only one small part at a time to accommodate regulatory changes.

Second, the two-stage process has allowed opponents to plants to delay the granting of operating licences.

Manufacturers and operators say they are constantly learning how to extend the lives of components and plants. They are benefiting from cumulative operating experience, a high degree of information sharing instigated after Three Mile Island and new developments in technology.

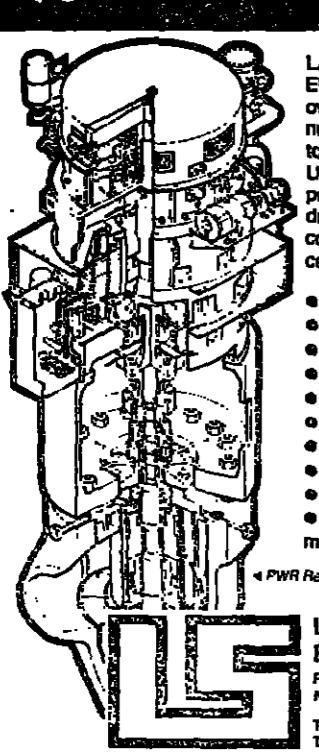
None the less, the nuclear power industry is confronting a disturbing fact as the average age of its plants rises. The operating and maintenance costs of nuclear power plants now exceeds those of coal power plants, according to the Utility Data Institute.

Nuclear power advocates had always argued it was only the capital cost of plants which were high, a disadvantage offset by operating costs lower than those for other fuels.

Although, the economic and political environment is looking more promising for nuclear power, the industry must still overcome such considerable hurdles. Utilities, deeply shaken by their experience with nuclear power in the 1980s, are still a long way from ordering their next nuclear plant.

Roderick Oram

THREE DECADES OF QUALITY ASSURANCE



LAURENCE, SCOTT & ELECTROMOTORS LTD have had over 30 years' experience in the nuclear industry and are now proud to have a major involvement in the UK PWR power station building project. Contracts in hand include drives as follows, plus the prime contract for LV switchboards, load centres and distribution boards.

- Reactor Coolant Pumps
- Main Feed Pumps
- Circulating Water Pumps
- Auxiliary Circulating Water Pumps
- Essential Services Pumps
- High Head Safety Injection Pumps
- Centrifugal Charging Pumps
- Residual Heat Removal Pumps
- Containment Spray Pumps
- Various other LV Class 1E auxiliary motors

PWR Reactor Coolant Pump and Motor

LAURENCE, SCOTT & ELECTROMOTORS LTD.
P.O. Box No. 25, Kersey Road,
Norwich NR1 1JD, England.
Telephone: (0603) 620333
Telex: 973234 Fax: (0603) 600767



FRAMATOME: BUILDING TOMORROW'S ENERGY TODAY.

Leading the way, France already draws 23% of its electrical power from nuclear energy. Framatome, with 53 nuclear power plants in operation, is a world leader in the field. With its extensive experience and technology manufacturing plants, Framatome is the core of a homogeneous industrial group. The scope of its nuclear programme enables the company to offer a wide range of services and components – to the benefit of present and future customers.

The background makes Framatome particularly well qualified to offer you the best in nuclear power plant technology. The range of products and services available to electrical power generation.

With Framatome, the future of nuclear power is already on the way.

FRAMATOME
Framatome S.A.
75075 Paris Cedex 17
France

BRAUNKHOLE TRANSPORT

Transportation Professionals
Specialists in Handling Radioactive Materials

USA: St.Louis, MO. Ph: 314-343-7287
Fax: 314-343-5893
CANADA: Montreal, PQ. Ph: 514-843-5839
Fax: 514-843-7089
Saskatoon, SK. Ph: 306-242-8300
Fax: 306-242-2311
HOLLAND: Rotterdam Ph: 10/4 04 60 55
Fax: 10/4 04 56 14
FRANCE: Pierrelatte Ph: 75/96 33 28
Fax: 75/96 23 96

EDLOW INTERNATIONAL CO

EXPERIENCE AND EXPERTISE
FOR 30 YEARS

MANAGING THE NUCLEAR FUEL CYCLE

- TRANSPORTATION MANAGEMENT
- REGULATORY ASSISTANCE
- SPECIALIZED SUPPORT SERVICES

INNOVATION IN MOTION

1666 CONN AVE, NW, WASHINGTON, DC 20009, USA
TEL (202) 483-4059 TLX 64387

POWER. While some believe it comes with money many industry leaders agree that the real source of power is knowledge. General, specific and often proprietary knowledge that can lead to results. And when it comes to nuclear inventory sales and marketing, no one has knowledge as powerful as AETC.

David Fishlock

الدبلوماسي

THE West German nuclear industry is looking back at a year of dashed illusions. After completion of nuclear power stations ordered over the past decade, the nuclear sector is now preparing for a period of inevitable slumping.

The last two of the three "convoys" pressurised water reactors - at Emsland and Neckarwestheim - went on stream during 1988, taking Bonn's tally of completed commercial-sized nuclear plants to 22. Atomic power accounted for nearly 40 per cent of electricity generation in 1988, against 37 per cent in 1987.

Installed nuclear capacity is now around 24,000MW. But it is unlikely to grow further until the next century and may well shrink over the next decade if the movement towards a nuclear "Aussiedler" (exit) gathers fresh pace.

The scaling down of West Germany's nuclear ambitions is reflected in the once-feasible target of 45,000MW of nuclear capacity to be installed by 1995. The goal was set by the Social-Democratic government in 1974 - but swiftly moved beyond the bounds of reality. The SPD now pledges a 10-year phasing out of nuclear power if it returns to government. The ruling centre-right coalition has also become considerably nuclear-minded following the Chernobyl disaster in 1986.

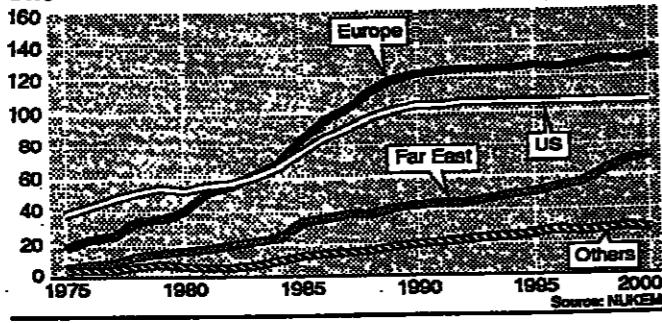
Although all countries have been forced to tone down nuclear plans, the reversal in West Germany has been particularly dramatic.

WEST GERMANY

Dashed dreams

Development of nuclear power in the Western world

GWe



The most spectacular example of Germany's bid to catch up its lag in nuclear technology with the US, Britain and France was the plan to build a commercial-size re-processing plant at Wackersdorf in eastern Bavaria.

The project was contested for years by the anti-atomic lobby and was the scene of countless demonstrations. In view of rapidly-rising costs and the fading value of the product to be extracted from the plant - plutonium - Wackersdorf has looked a white elephant for several years.

The Bonn government this year finally admitted the venture no longer made economic

Rather than send spent fuel rods to Wackersdorf, the utility will be continuing their practice since 1976 of despatching burnt uranium to the French re-processing complex at La Hague, on the Normandy coast. The French nuclear fuel concern, Cogema, is offering a price for re-processing from the end-1990s onwards which is about one-third the prospective price of Wackersdorf.

It is only a matter of time before the roughly 600MW fast-breeder reactor at Kalkar, on the Lower Rhine, is also formally abandoned. The almost-completed plant looks likely to become one of the world's most expensive technological ruins as a result of a row over safety with the North Rhine-Westphalia government.

The experimental high-temperature reactor at Hamm-Uentrop will also be closed down over the next few years because of financial problems and controversy over safety. The small re-processing plant at Karlsruhe, which has separated more than one tonne of plutonium since 1976, is also coming to the end of its life.

Coming with the lack of follow-up orders, the industry is inevitably retrenching. KWU is now fully under the wing of the Siemens group. It intends co-operation with Framatome, of France, and is also pooling its efforts in the high-temperature reactor area with Asea Brown Boveri - where hopes are still smouldering of orders from the Soviet Union.

France, meanwhile, is hoping to exploit its cheap, surplus nuclear-generated electricity under the Rhine to the Federal Republic. Paris is making plain that it expects West Germany to open up to electricity imports as part of future energy co-operation.

Even though the German nuclear industry has learnt to live with disillusion, the Bonn government has by no means seen the end of nuclear controversy.

David Marsh

BRAZIL'S nuclear energy programme has generated little heat and barely a glimmer of light. The country has only one temperamental Westinghouse reactor to show for the \$6bn invested in nuclear energy and, as a means of complementing vast hydroelectric resources, the nuclear industry has been a humiliating and costly failure.

Crippling financial difficulties have forced the government to virtually abandon its 1975 nuclear agreement with West Germany which envisaged the construction of eight nuclear power plants at the beach resort of Angra dos Reis, 90 miles south of Rio de Janeiro, and at an equally beautiful inlet 100 miles south of São Paulo.

At the same time, the shadowy military-controlled parallel nuclear programme has made progress in dominating the nuclear cycle. The continued existence of this parallel programme under the civilian government of President José Sarney has led to a widespread belief that the military fostered illusion of possessing their own nuclear weapons. Denials have not allayed doubts. The air force insists on building a rocket system, ostensibly to place civilian satellites in orbit and the navy has built a nuclear propulsion centre near São Paulo to develop a submarine reactor.

A clause in Brazil's constitution forbidding the military use of atomic energy has not blunted criticism, mainly because Brasília still refuses to sign the Nuclear Non-Proliferation Treaty.

Brazil claims it needs nuclear power to avert an energy crisis expected to emerge within the next two decades. But Professor José Goldberg, rector of the Uni

versity of São Paulo and a senior nuclear physicist, says electricity generated by nuclear power costs \$3,000 per kilowatt installed, compared with \$1,200 for the gigantic Itaipu dam. He adds that the much feared energy crisis can be defused by improving efficiency in distribution systems and encouraging energy conservation.

Brazil's first commercial nuclear plant, a turnkey Westinghouse reactor, has been dubbed the gloom-worm by one

private lenders and the Japanese government to suspend \$300m of co-financing loans as well asibility for running the nuclear stations to Eletrábras, the state electricity company. The government spun-off Nucleo Brasileiro's industrial and mining activities to a new company, Indústrias Nucleares Brasileiras (INB), which it hoped would attract private investors.

The World Bank promptly suspended disbursement of a \$1bn loan to the electricity sector because it was afraid the money would be used to shore up the nuclear programme. The Bank's position forced private lenders and the Japanese government to suspend \$300m of co-financing loans as well.

Crippling financial difficulties have forced the Government to virtually abandon its 1975 nuclear agreement with West Germany

The frozen \$5m balance has become a source of irritation in Brazil's tense relationship with its foreign creditors.

Under the terms of the West

German nuclear accord, a consortium of companies led by Kraftwerk Union (KWW) were due to have the first plant,

Angra II, with a capacity of 1,245MW, operational in 1983. However, it looks unlikely to come on stream before 1994.

The cost so far is reportedly \$2.5bn with a further \$1.2bn to complete.

Even though work on the 1,245MW Angra III unit has hardly begun, 85 per cent of its German-built equipment is ready. There are fears that the long delays and poor storage conditions have damaged the equipment. Budgeted at \$1.55bn, Angra III, if ever completed, could cost \$2.6bn.

Parallel to the 'official' nuclear programme, the military have been running one of their own. The military (plus

many civilian nuclear scientists) realising their US and German accords prevented them from dominating the nuclear cycle, decided to go it alone like the Argentines.

According to Mr Rex Nazare Alves, head of Brazil's National Nuclear Energy Commission (CNEN), the 'parallel' programme began in March 1979. Under the aegis of the navy, the programme was created to enrich uranium using independently designed gas centrifuge technology. In September 1987, an overjoyed President Sarney announced that Brazil had mastered the cycle, enabling it to enrich uranium outside international controls. The navy hopes that these advances will enable Brazil by 2000 to produce a nuclear-powered submarine.

On other military uses of this technology, Admiral Maximiano da Fonseca, a former navy minister said in 1987: "I would applaud the day Brazil exploded an atomic bomb."

However, President Raúl Alfonsín of Argentina has promised each other not to develop nuclear arms. Both have paid visits to each other's military research bases and exchanged symbolic nuclear co-operation accords.

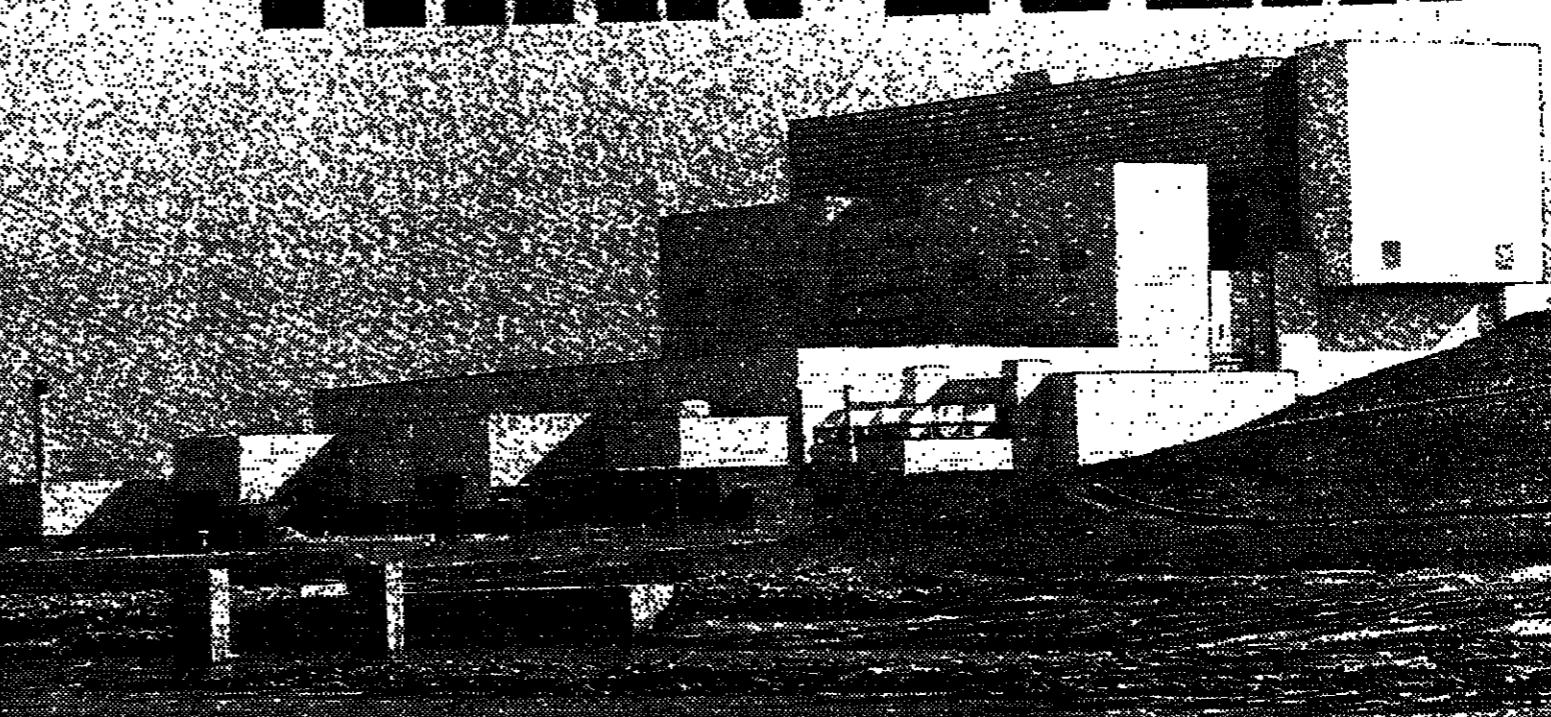
Brazil's nuclear capability will become fully credible if it can develop a delivery vehicle. However, the air force's 'satellite launch vehicle' (VLS) project, which could be adapted as a nuclear tipped ballistic missile, faces budgetary limits. A prototype of the VLS rocket was to be ready this year, but has been postponed, probably until 1992. Overall the programme suffers from trying to satisfy too many interest groups - the navy wants submarines, the business want contracts and the scientists want research projects.

John Barham on Brazil's disappointing nuclear programme

No light at the tunnel's end

John Barham

SCOTLAND IS NOW MORE POWERFUL THAN EVER.



Cogema is the only nuclear fuel company covering the whole range of the fuel cycle industrial activities: uranium exploration and production, conversion, enrichment, fuel fabrication and assembly, reprocessing, recycling, waste conditioning, transportation. The Cogema group markets fuel products and services as well as technology and engineering services, mining, fuel fabrication, storage, reprocessing and waste conditioning, including the vitrification process for High Level Waste.

2. RUE PAUL-DAUTIER, B.P. 4. 78141 VÉLIZY-VILLACOUBLAY, FRANCE.
TÉL. : (1) 39 46 96 41. TÉLÉX : 669 833 F.

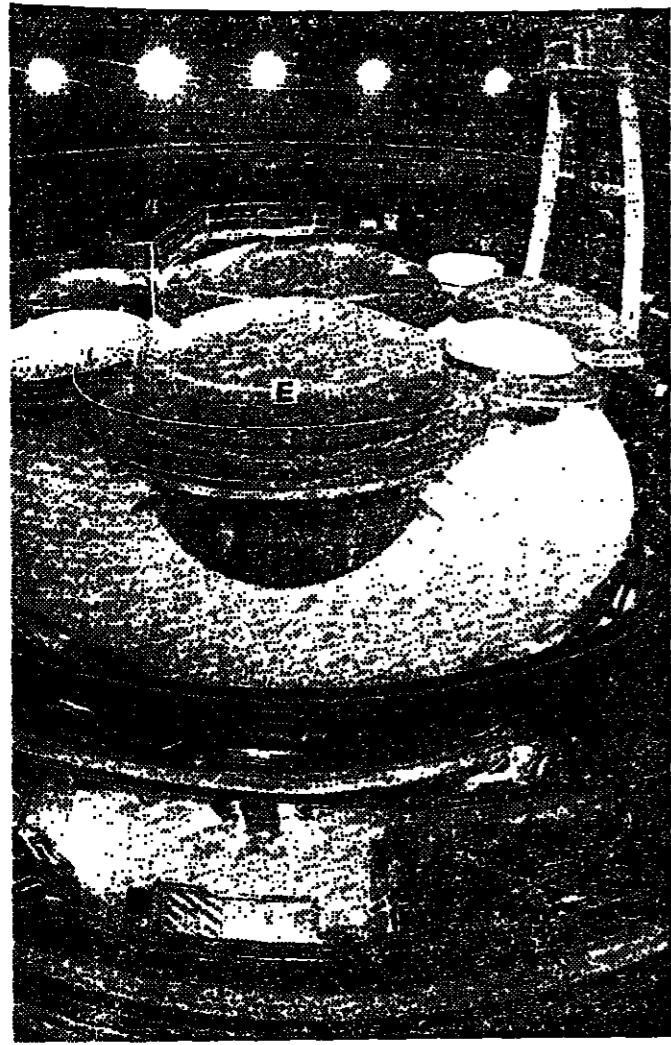
That's because we have Torness, 'A showpiece for all that is best in Scottish and British engineering', according to the Prime Minister, who opened the station on 13 May this year.

The output of Torness means that 60 per cent of Scottish electricity is now produced by nuclear power. Which is a major investment in the future of Scotland.

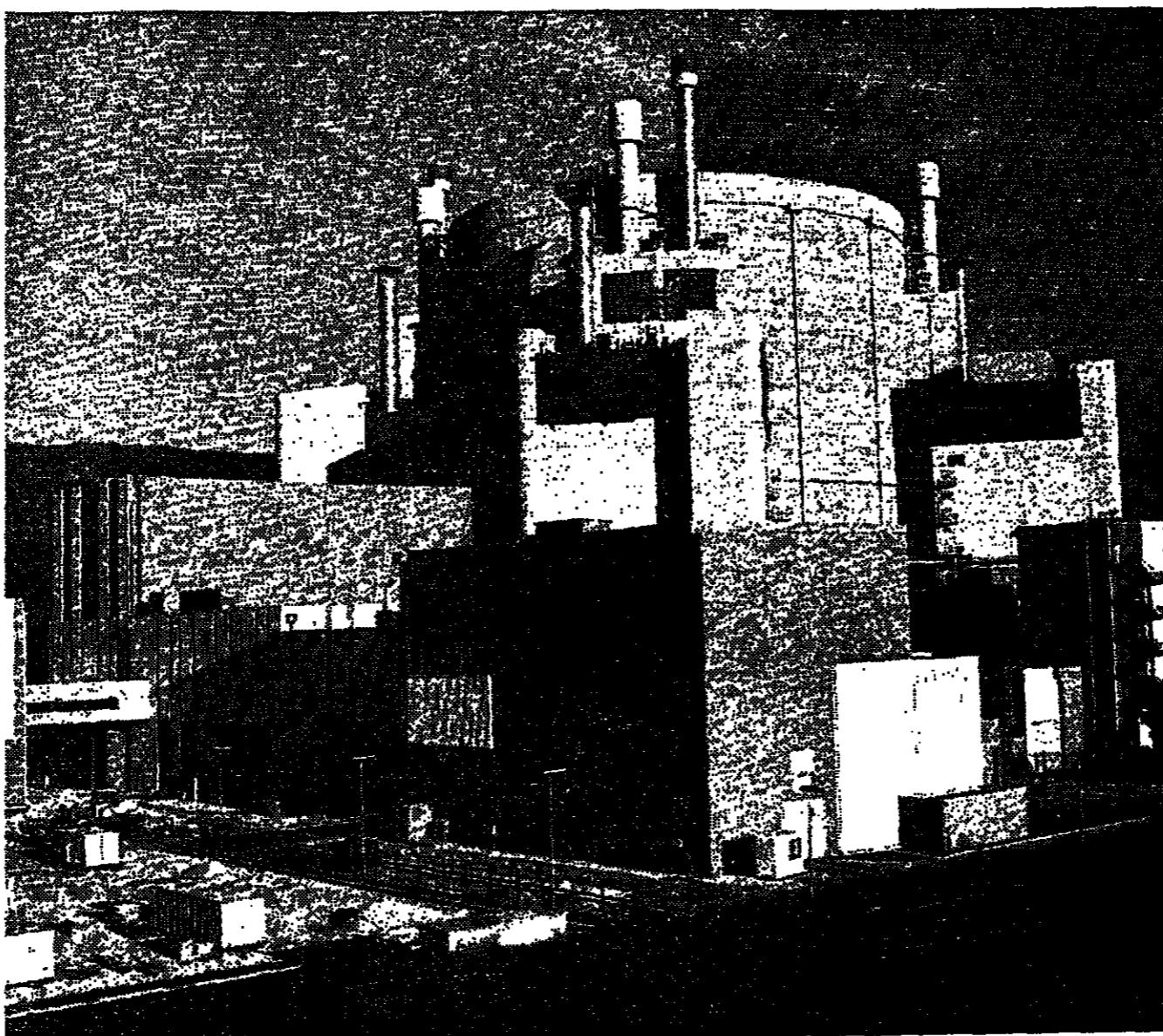
And this, we believe, heralds the beginning of a new

SSEB Electricity
POWER OF SCOTLAND

WORLD NUCLEAR INDUSTRIES 6



France's SuperPhénix nuclear power station: no country has pursued the nuclear option with such determination as France. Yet just when it has virtually completed its equipment programme, it finds itself facing fresh problems. Oil prices have slumped and confidence in nuclear has been shaken by Chernobyl. France now faces a big electricity surplus



Ashley Adcock

SWEDEN

Increased pressure for an early phase-out

THE Swedish Government is being pulled in opposite directions over the nuclear power issue, which theoretically was settled in 1980 when a national referendum approved the abolition of atomic plants by 2010.

Responding to growing environmental sentiment in the run-up to last September's elections, the Social Democratic government announced it would accelerate the nuclear phase-out by closing down two of the country's 12 reactors by 1995-96.

Political pressure for an early shutdown has not eased. The parties that made the biggest gains at last year's polls - the Greens, the Communists and the agrarian Centre - are strongly anti-nuclear and the minority Socialist Government is dependent on their parliamentary support.

But the government is also facing criticism from industry and the trade unions, which fear that Sweden can not afford to abandon nuclear since it generates about half of the country's electricity and provides a cheap source of energy for the country's main exporters.

Their doubts have been strengthened by estimates

from state energy officials that it will cost as much as Skr 100bn to dismantle and replace the nuclear stations, doubling electricity prices in the process and finally leading to the loss of 60,000 jobs. The government disputes these figures.

There are few alternatives to nuclear power. Sweden has raised the limit in exploiting hydroelectric power, which provides the other half of the country's electricity generation, since the few remaining undammed rivers are protected for their scenic beauty. Oil and coal-fired plants are a doubtful replacement since their emissions would exceed Sweden's stiff air pollution levels.

Vattenfall, the state power board, believes the best solution would be gas-fired plants, combined with stringent energy conservation efforts and a marginal contribution from solar and wind power.

But Vattenfall warns that the gas-fired plants would be twice as expensive to operate as nuclear ones.

The board highlighted the problem earlier this year when it estimated that it would cost Skr 13bn to replace the first two nuclear reactors in the mid-1990s. This would drive up

electricity prices by 40 per cent within the next decade, it said. In addition, the gas-fired plants pose a potential environmental problem with their leakage of methane gas.

Questions have also been raised as to whether there is enough time or money to introduce natural gas on such a massive scale in Sweden.

Among others, fines for the discharge of pollutants, and increased taxes on oil and electricity to encourage energy conservation and fundamental energy research.

But while these industries must worry about rising energy costs harming their overseas competitiveness, they also fear that there will be not

planning or development stage would keep demand within a range of between 88 TWh and 96 TWh a year by 2010.

Uncertainty over energy availability may accelerate the relocation of Swedish plants abroad. This is already occurring as Swedish companies build up production facilities within the European Community ahead of the elimination of internal trade barriers in 1992.

The Swedish forestry concern Svenska Cellulosa AB (SCA), the country's fourth biggest electricity consumer, recently explained that it was constructing a new paper factory in southern France because of the nearby presence of a nuclear plant.

The prospect of factories closing in Sweden due to the abolition of nuclear energy is worrying the trade unions.

"It's all right to go out and say that we shall not have nuclear power or more hydro-power or increased carbon dioxide emissions, but we should also talk about the political consequences this has on employment and other things," said Mr Stig Malm, chairman of the blue-collar trade union confederation LO in a veiled attack on the government's growing anti-nuclear stance.

The critical remarks by Mr Malm and other trade union leaders is posing a dilemma for the Social Democrats and widening the gulf within the party over the nuclear issue. It was the Social Democrats who promoted the construction of nuclear plants in the 1960s and 1970s and some sections of the party criticise the government's reversal under Birgitta Dahl, Environment and Energy Minister, as being politically short-sighted.

Most of the jobs that would be lost with a nuclear shutdown are located in Norrland, the Social Democrats' biggest electoral stronghold. Moreover, public opinion is swinging back in favour of nuclear power only three years after Chernobyl. One recent opinion poll found that 57 per cent would favour the continuation of nuclear power after 2010.

This reflects worries among homeowners that the abolition of nuclear power will dramatically increase their electricity bills. The public has also been reassured by the findings of a post-Chernobyl nuclear study

commission which concluded that Sweden's lightwater reactors, three-fourths of which were built by ASEA-ATOM, had high safety standards.

The government's decision to shut the first two reactors in the mid-1990s may ironically doom plans for a full-scale phase-out. "I believe that the early shutdown can promote a positive attitude towards nuclear power," says SCA board chairman Mr Bo Rydin.

"When all the negative consequences are shown, people will change their opinions."

The merger means that one mine from the rich northern Saskatchewan mines can be passed through in-house refining and conversion facilities in Ontario. About 20 per cent of the material thus treated is converted into uranium dioxide for use in Candu reactors. The remainder is converted into uranium hexafluoride and exported for enrichment.

The company says it would like to see as much as possible of its mine output processed in its own downstream facilities. Under the terms of the merger, 60 per cent of Cameco is to be

PUT THE SGN ADVANTAGE
INTO
YOUR NUCLEAR PROJECTS.

Having SGN on your team transfers the invaluable know-how and return of operating experience that SGN gains from projects engineered in the nuclear fuel cycle. In fuel handling and storage, waste treatment and disposal, decontamination and decommissioning, as well as in spent fuel reprocessing, SGN is active all over the world. Whatever the subject, SGN brings an advantage to your project: technical excellence and mastery of safety.



HIGH TECHNOLOGY ENGINEERING
Business Development Department 1 rue des Hérons - Montigny le Bretonneux
78182 St Quentin en Yvelines Cedex 1 Telephone : 33 (1) 30 58 60 11
Telex : 33 (1) 30 58 68 52 Telex : 698 816 F

Announcing McGraw-Hill's
Eighth Annual Nuclear Services Conference

sponsored by
Nucleonics Week, NuclearFuel and Inside N.R.C.

NUCLEAR COMMERCE
IN THE 1990s

October 30-31, 1989
The Paris Hilton ♦ Paris, France

The 1990s, with shifting international markets and rising concern about the environment, is the decade when nuclear power can prove its worth - or die. Speakers from around the globe will analyze international business trends and opportunities of the '90s.

For information, write: Nucleonics Week, 1221 Ave. of the Americas, New York, NY 10020, USA; or call 800-223-6180, USA; in NY State, 212-512-6410; telex RCA 232365 MGH PUBNET; facsimile: 212-512-2723.

SPECIALIZED ENGINEERING SINCE '76

IN DECONTAMINATION, DISMANTLING AND
RADIATION PROTECTION
KNOW-HOW, FLEXIBILITY AND INTERNATIONAL
AVAILABILITY

CONTACT - SINA - SERVICES IN GERMANY



SINA INDUSTRIE SERVICE GMBH
BAYERSTRASSE 53 D-7530 Pforzheim
TEL. (7231) 380801 FAX: (7231) 380857
TELEC 783597 sina d

JOINT VENTURE - PARTNERS IN FRANCE, SPAIN AND JAPAN

CANADA

Spoilt on a rich diet of 'yellowcake'

CANADA is one of a handful of countries which can boast a fully integrated nuclear industry, from rich uranium mines at one extreme to electricity generating stations and further advanced applications at the other.

The country is comfortably the world's largest source of U3O8 or "yellowcake" - the semi-processed form in which most uranium is sold to consumers. It has also developed from scratch its own pressurized heavy water reactor, Candu.

But neither scale nor technological prowess have spared Canada the problems which have plagued so much of the nuclear industry over the current decade. Depressed uranium prices and very low demand for new nuclear power reactors have pummelled the sector every bit as hard as its counterparts elsewhere.

Earlier this year, Cameco - the Saskatoon-based company which is the world's largest single uranium producer - laid off 170 staff and temporarily closed a mine in response to low yellowcake prices. The group, whose output last year amounted to some 15m lbs of U3O8 equivalent to 16 per cent of the global total, is also reckoned to be among the world's lowest-cost producers.

Meanwhile, the government-owned Atomic Energy of Canada Ltd (AECL) is still awaiting its first Candu reactor sale overseas since 1981. The company is also having to cope with reduced levels of government funding. In the five years since 1983-84, parliamentary appropriations have fallen by virtually half. AECL has responded by drawing up plans for a smaller reactor - the Candu 3 - and by using its formidable research base to diversify into areas like engine sensors and robotics.

The company holds high hopes for the Candu 3, which is cheaper and should take considerably less time to build than its predecessor, the Candu 6. But its optimism has yet to translate into orders.

This reflects worries among homeowners that the abolition of nuclear power will dramatically increase their electricity bills. The public has also been reassured by the findings of a post-Chernobyl nuclear study

commission which concluded that Sweden's lightwater reactors, three-fourths of which were built by ASEA-ATOM, had high safety standards.

With the industry so long in the doldrums, it is perhaps not surprising that an extensive restructuring is currently underway.

Cameco was formed only last October through the merger of federal government-owned Eldorado Nuclear and the provincially held Saskatchewan Mining Development Corporation (SMDC). The deal created an integrated uranium company of considerable stature in world terms.

The merger means that one mine from the rich northern Saskatchewan mines can be passed through in-house refining and conversion facilities in Ontario. About 20 per cent of the material thus treated is converted into uranium dioxide for use in Candu reactors. The remainder is converted into uranium hexafluoride and exported for enrichment.

The company says it would like to see as much as possible of its mine output processed in its own downstream facilities. Under the terms of the merger, 60 per cent of Cameco is to be

transferred into private hands within four years.

Privatisation is also in vogue at AECL, where two former divisions have been spun off and rechristened in preparation for their sale to private buyers.

Nordion International, formerly Radiochemical, produces radioactive isotopes, such as cobalt-60, used in cancer treatment and food irradiation. Canada provides 88 per cent of world cobalt-60 supplies. Theratronics International, previously Medical Products, makes machinery and equipment used in radioactive medical treatments. Nordion, whose annual sales total about C\$90m, is expected to be sold to a Canadian engineering company. Theratronics, with sales of about C\$40m, may be bought by employees.

Having expressed its commitment to a continuing Canadian nuclear programme the government is trying to encourage more co-operation between AECL and Ontario Hydro, the main operator of Candu plants, the better to

exploit scarce sales opportunities at home and abroad.

Ontario Hydro operates 16 of the 20 Candu reactors currently up and running, the remaining four being situated in Quebec, New Brunswick, Argentina and South Korea. Four more units at Darlington, near Toronto, are due on-stream at regular yearly intervals between 1989 and 1992. In 1987, nuclear-electric generation supplied 47.5 per cent of Ontario's electricity needs. The corresponding figure for the whole of Canada was about 15 per cent.

Unlike light water reactors, which function by using enriched fuel to raise the probability of fission capture of neutrons, the Candu system employs natural uranium fuel and uses materials in the reactor core which minimise neutron absorption.

The Candu is heavy water moderated and cooled - a factor which adds substantially to its capital cost.

The Candu has consistently maintained a superior operating record compared with other reactor types, a fact which has been an immense source of pride to the domestic industry. This is largely because of the reactor's capacity for on-power refuelling. This is made possible by the housing of Candu fuel bundles in a large number of replaceable individual pressure tubes.

The adoption of the relatively complex pressure tube design has not come without its problems, however. Hopes that the pressure tube system would last for the projected 30-year life of the plant have been dashed by the closure for refuelling of two of Ontario Hydro's Pickering reactors which commenced commercial operations in 1971. Ontario Hydro has estimated the direct replacement and recommissioning cost at C\$400m. Both units have now been restarted.

David Owen

CANBERRA PACKARD

Canberra Nuclear Data, Nucleus House, Weston Road, Bourne End, Bucks SL8 5DU. Tel: (0628) 819499

AT THE HEART OF THE NUCLEAR INDUSTRY

Canberra Packard, respected worldwide for fine detectors, NIM electronics and data acquisition systems - Nuclear Data, the name associated with high performance, computer-based analysis and control -

Now the two have joined forces to provide the complete systems capability demanded in nuclear power and health physics.

- Data Acquisition
- Health Physics
- Industrial Control
- Multi-user Installations
- Plant Monitoring
- Networking

WORLD NUCLEAR INDUSTRIES 7

NUCLEAR FUEL

Plentiful supplies

THE supply of fuel for power stations is one of the most assured sectors of the nuclear industry today. The nuclear power plants that are now supplying 16 per cent of the world's electricity will mostly require fuel for the next 30 to 40 years. Plants that are under construction and due to come on line during the next decade will ensure a modest growth of 20 per cent. The present annual value of the world nuclear fuel business is about \$25 billion.

All this would be encouraging were it not for the fact that the nuclear fuel market was expected to be very much larger in the 1970s when there appeared to be an obvious need for rapid expansion of nuclear power. As a result, very large investments were made in uranium exploration and capital intensive facilities for processing and fabrication of material into the high-tech fuel assemblies that are loaded into nuclear reactors. The actual market today has turned out to be only half the size of 1975 forecasts.

A feature of nuclear fuel is that a very small amount of it produces a large amount of electricity. Another feature is that it requires several stages of special processing and final fabrication into precisely engineered fuel assemblies.

These features have made

possible an international market in which, for example, uranium could be mined in Australia, converted into uranium hexafluoride gas in the UK, enriched in the Soviet Union, fabricated into fuel assemblies in Sweden and 'burnt' in a reactor in Finland.

Each stage in the chain involves a sizable increment of added value. There is therefore lively competition among the international suppliers and equally active shopping around by utility customers both for prices and delivery of supply.

The uranium market has suffered most from the over-supply situation in the past with spot prices sinking as low as \$14/lb compared with a peak of \$43/lb in the mid-1970s. But after many years of production exceeding the actual requirements of operating nuclear reactors, production fell below requirements in 1988 and the operators are now starting to draw down on stock-piles.

By the mid-1990s suppliers will be bringing in planned additional capacity and by the turn of the century they should

be looking for new capacity. There is currently more than 30 per cent overcapacity in uranium enrichment plants in the West. This is despite the closure of one of three large US gaseous diffusion plants in 1985 and cancellation of a similar-sized centrifuge project which together have halved the capacity that the US would otherwise have today. The two remaining US plants are operating at around 50 per cent

The market today is only half the size of 1975 forecasts

capacity and supplying 42 per cent of the western market.

In France, the Euronuclear gaseous diffusion plant is doing better with about 75 per cent of its capacity used and a 35 per cent market share. Unlike Urenco and a group of three US electric utilities is planning a new centrifuge plant which, it is claimed, will be capable of supplying 15 per cent of the US market by 1995.

Later in the decade the new technology of laser enrichment could become available in the US and France and may be used for special purposes such as re-enrichment of recycled uranium.

It is not difficult to see that the over-supply situation in uranium enrichment will persist until 2000. Fabrication workshops for the production of fuel assemblies are a little easier to set up than uranium mining and enrichment ventures and have therefore adapted better to the size of the market. Even so, most countries with nuclear power programmes have sought to establish domestic fabrication facilities and it is possible to identify 24 plants around the world that are producing fuel assemblies or have at some time produced them.

The main survivors in fuel fabrication are those companies that have been involved in the design and construction of reactors. The utilities tend to keep these suppliers on their toes by occasionally purchasing fuel reloads from the different manufacturers but on the whole the suppliers retain a base load of business which is directly related to the number of reactors that they, or their associates, have sold.

Simon Rippin

electricity executives have scrutinised plans for Thorp and concluded that no economic reprocessing should be necessary after the first decade to meet the projected costs.

On the basis of this confidential declaration, BNFL is negotiating for 4,000 tonnes of German spent fuel for reprocessing after 2002, on terms that will also give it a share in the "downstream" business of making mixed-oxide (MOX) fuel containing plutonium as well as uranium from the burnt fuel it recycles.

In Sweden, where they have frequently extolled the virtues of storage over reprocessing, the Swedish Nuclear Fuel and Waste Management Company (SKB) plans to progress systematically through studies in its "hard rock laboratory" starting in 1993 - to a preliminary safety report on a repository design around 2000.

BNFL says it has been talking to potential customers in terms of prices of between 40-50 per cent lower than base load prices, for what it calls post-base load reprocessing capacity in Thorp, for the 10-15 years beyond 2002. German

David Fishlock

Reprocessing of spent fuel

Jury still undecided

SPENT nuclear fuel - often wrongly called nuclear waste, for it still contains almost as much energy as new fuel - can be managed in one of two ways. It can be chemically dissolved and its energy-rich elements recycled as fresh fuel; or it can be stored with a view to eventually sealing it in a repository as radioactive waste.

The jury is still out on the costs of each route, although recycling has the obvious merit - freely acknowledged by every other kind of fuel - of conserving and maximizing use of a scarce natural resource. But whereas during the next few years the costs of reprocessing will harden, as new facilities enter service, it will probably be many years yet before the full cost of discarding unrecycled spent fuel is known for sure.

Undoubtedly, France has the greatest experience of any nation in recycling light water reactor fuel, having reprocessed more than 2,500 tonnes of uranium at Cogema's factory at La Hague. Cogema's UP2 reprocessing plant has doubled its throughput from 250 tonnes in 1983 to about 500 tonnes per year. Cogema's reprocessing experience is now

being recycled into the final stages of commissioning the biggest UP3 reprocessing plant, scheduled to come on-stream at La Hague next year.

The West German electricity supply industry, as one of Cogema's biggest customers for reprocessing, recently demonstrated its confidence in this technology through its negotiations with the Germans for a new facility at La Hague which it will own jointly, to meet part of the German reprocessing requirements well beyond 2000.

Since the early 1970s, France, West Germany and the UK have been exchanging experiences of the technology of reprocessing and associated radwaste management practices through a tripartite "club" known as United Reprocessors GmbH. URG comprises Cogema, DWK (the German reprocessing company) and British Nuclear Fuels. Through URG, BNFL obtained the French vitrification technology

for highly radioactive waste liquids from reprocessing, coming on-stream next year at Sellafield, Cumbria.

BNFL is also building its thermal oxide reprocessing plant (Thorp) at Sellafield, as a 600 tonnes per year facility expected in operation in 1992. Its receipt and storage sections are already preparing spent fuel for reprocessing. Construction is "going very well," says Mr. Neville Chamberlain, BNFL's chief executive. He says it has stayed on schedule and to cost for the past three years, since a new management team appraised the programme.

The base load of reprocessing at Thorp, now upgraded to 6,000 tonnes over its first decade, is already committed to the electricity utilities which are funding the £1.55bn construction with "up-front" cash payments. What happens beyond 2002, when the base load has been recycled, is now

a matter of considerable commercial interest.

On the basis of current costs for base load reprocessing, some analyses have concluded that final disposal of unrecycled fuel could be 30 per cent cheaper. The big uncertainty is that no one yet knows for sure what a repository for unrecycled spent fuel will cost.

In Sweden, where they have

frequently extolled the virtues of storage over reprocessing, the Swedish Nuclear Fuel and Waste Management Company (SKB) plans to progress systematically through studies in its "hard rock laboratory" starting in 1993 - to a preliminary safety report on a repository design around 2000.

BNFL says it has been

talking to potential customers in terms of prices of between 40-50 per cent lower than base load prices, for what it calls post-base load reprocessing capacity in Thorp, for the 10-15 years beyond 2002. German

David Fishlock

Less well developed are pro-

WASTE MANAGEMENT

The search for a safe and sound burial site

EVER since a British newspaper proclaimed in 1975 that Windscale was likely to become the "nuclear dustbin" of the world, each country has been expected to deal with the final management of its own radioactive waste.

While this may not always be the ideal solution, especially for smaller countries, it has got most countries to face up to the fact that they must make the necessary provisions. Many national organisations have been set up or nominated to take responsibility for the management of radioactive waste. Thus we have names such as Nirex in the UK, Andra in France, SKB in Sweden, DWI and PTB in Germany, Ondra in Belgium, Nagra in Switzerland, Cora in the Netherlands, Enresa in Spain and Nucleco in Spain.

The main survivors in fuel fabrication are those companies that have been involved in the design and construction of reactors. The utilities tend to keep these suppliers on their toes by occasionally purchasing fuel reloads from the different manufacturers but on the whole the suppliers retain a base load of business which is directly related to the number of reactors that they, or their associates, have sold.

Simon Rippin

cesses for final conditioning of spent fuel in those countries which are choosing not to reprocess. The Swedes have, however, satisfied themselves that final disposal of spent fuel will be possible and Germany is planning a small pilot facility to demonstrate the direct disposal option.

In the US work is mainly directed towards developing the techniques for the interim storage of rapidly accumulating spent fuel. Various rod consolidation techniques have been developed for packing fuel assemblies into smaller volumes and several designs of

There exists plenty of good technology for conditioning waste.

The main problem is to get agreement on final storage and disposal strategies

dry storage casks have been approved for use as an alternative to storage under water at nuclear reactors.

For intermediate and low-level waste there are now many commercially available processes for volume reduction by compaction or incineration. Processes for incorporating these waste materials in cement or bitumen and overpacking for transport and storage, are also well developed.

Following a furore last year when traces of plutonium were found in some low-level waste returned to Germany after conditioning in a plant in Belgium, there are demands for tighter checks on the contents of waste containers. A variety of techniques - including systems as sophisticated as X-ray body scanners - are being proposed. But where is the waste finally going to

Here again there is no shortage of good technical options for isolating different kinds of waste from the environment for as long as it takes for the radioactivity to decay. Extensive national and international

research programmes have analysed the safety case for shallow or deep disposal in rock salt, granite and clay or on or below the deep ocean bed. Without exception the analyses indicate a dismissively small risk of any danger to present or future generations but with almost equal lack of exception the public is unconvinced.

Solid low-level waste is presently being accepted at three shallow land burial sites in the US, at one in the UK and one in France which also accepts short-lived, intermediate-level waste. Low and intermediate-level waste was deposited at a depth of 500m to 600m in the former Asse salt mine in Germany between 1961 and 1978.

An impressive new repository at a depth of 60m below the seabed of Sweden's Baltic coast started to receive low-level waste during the past year and will also be taking intermediate-level waste in the future.

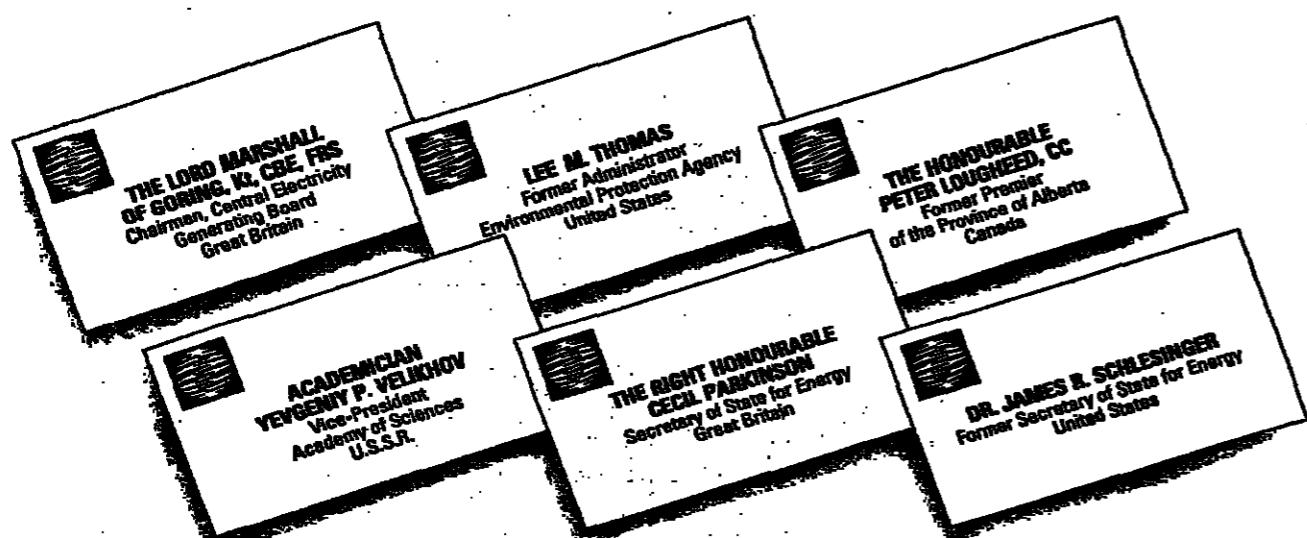
Apart from these cases of repository operation, many plans are at the stage of prospective site investigations with a few, such as the former Konrad iron ore mine in Germany, having got as far as licensing applications. For intermediate and low-level waste there are now many commercially available processes for volume reduction by compaction or incineration. Processes for incorporating these waste materials in cement or bitumen and overpacking for transport and storage, are also well developed.

For high-level fission product wastes, a successful process for vitrification has been in operation at Marcoule in France since 1978 and commencing in 1981. A variety of techniques - including systems as sophisticated as X-ray body scanners - are being proposed. But where is the waste finally going to

Even so, several countries are searching for prospective locations for high-level waste repositories and Germany and the US have chosen sites for detailed investigation. Exploratory shafts are already being sunk into a huge underground dome of salt at Gorleben in Germany and a repository could be built by 2000. After an amendment last year to its radioactive waste management act, the US is to concentrate its investigations on one prospective site at Yucca mountain in Nevada and is now hoping to have a repository available by 2003.

Simon Rippin

THEY'LL BE COMING!



being faced with increasingly complex challenges which must be met, which is why the theme of the 14th Congress is "Energy for Tomorrow". Research experts, scientists, government leaders and decision-makers in the energy field will all be present at this historic Congress.

14th Congress of the World Energy Conference

September 17-22, 1989

Palais des congrès de Montréal

WILL YOU?

To register, either phone, send a business card, or fill out the coupon below and send it to:

World Energy Conference

34 St. James's Street

London, SW1A 1HD

Great Britain

Tel.: 930-3966

Telex: 264707 WECHI90

Fax: 925-0452 or to:

The Organizing Committee

14th Congress of the

World Energy Conference

2, Place Félix-Martin, 7th Floor

Montreal, Quebec H2Z 1Z3

Tel.: (514) 995-1999

Fax: (514) 878-4500

Telex: (021) 055-60042

GENERATE

SIMULATE

HUNTERSTON - TORNESS - DOUNREAY - LONGANNET - SIZEWELL

We do it well.

Part Task and Full Scope Simulators for the Power Industry

Marconi
Simulation

Napier Building, Donibristle Industrial Park
Nr. Dunfermline, Fife, Scotland, KY11 5JZ
Telephone: (0383) 822131 Telex: 727779
Fax: (0383) 824280 (Gp. 3)

A Business Unit of Marconi Instruments Ltd.
Holding Company - The General Electric Company plc of England

WORLD NUCLEAR INDUSTRIES 8

Fast reactors suffer from anti-nuclear sentiment but they boast safety features which could prevent a Chernobyl-type disaster

Commercial exploitation remains a distant reality

WHEN Mr Cecil Parkinson, UK Energy Secretary, announced a year ago that there was to be a large cutback in government funding for the fast reactor research and development programme, he said government expectation was that "commercial development of fast reactors in the UK will not now be required for 30 to 40 years".

Many in the nuclear industry accuse Mr Parkinson of picking names from the air, but the problem remains that it is almost impossible to predict when electric utilities will want to start buying this type of power plant on a commercial basis.

The fast reactor was from the outset developed for commercial purposes. When other thermal reactors, which had been developed for submarine propulsion and plutonium production, were turned to peace-

ful purposes they were seen as something of a stop gap before the eventual commercial introduction of much more efficient fast breeder reactors.

Discoveries of low-cost uranium in a fair abundance and the high capital cost of the fast reactor relative to the rapidly evolving light water reactors, changed this early perception.

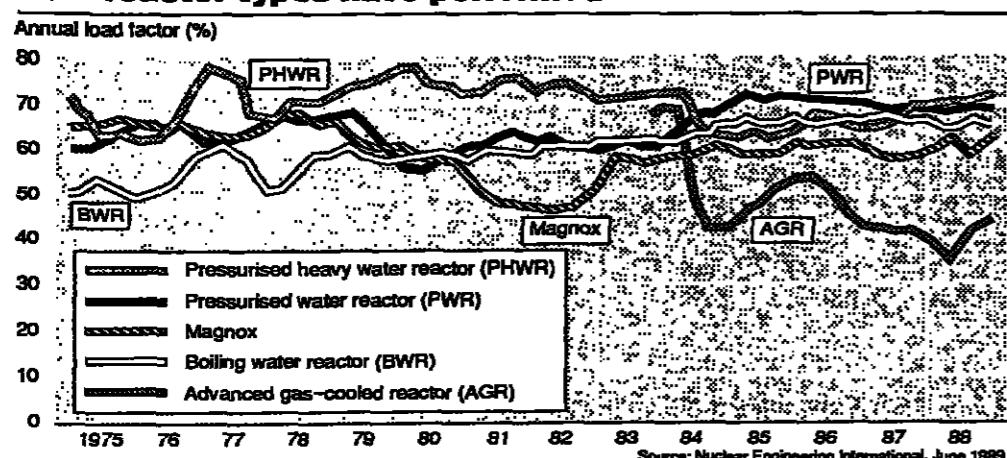
The eventual role of the fast breeder reactor, which can get 60 times as much energy out of uranium as thermal reactors

grown out of the post-Chernobyl climate of opinion which has caused a further slow down in the expansion of nuclear power.

The fast reactor has several inherent safety features which would prevent a Chernobyl-type accident but it is still, rather unfairly, viewed as a system that is somehow more dangerous than other nuclear plants. Thus it suffers first from anti-nuclear sentiment.

A reversal of the nuclear

How reactor types have performed



Source: Nuclear Engineering International, June 1989

THERE is a growing belief among companies operating nuclear plants that their systems are more complex and demanding than they need to be. This belief has fuelled a search, in the US particularly, for new designs of reactor, a search in which the electricity companies, through the Electric Power Research Institute (EPRI), their co-operative research and development agency, have collaborated closely with the reactor vendors.

The search has two objectives. One is an advanced light water reactor (ALWR) of the same output as the standard commercial units today but simpler, more rugged, easier to operate, less expensive and quicker to build. The quest has stimulated international collaboration.

For example, Japan, West Germany, Italy and Sweden all participated in the development of an advanced version of General Electric's boiling water reactor. Tokyo Electric Power plans to build the first, starting in 1991, and taking only 48 months compared with the 60-month schedule of those it is currently constructing.

The second, longer-range aim is a smaller reactor, of a size companies believe will match the slower rate of increase in load growth expected, and with passive safety features. The diseconomies of scale will be offset, it is hoped, by a simpler system, more readily built on a production line. Passive cooling requires that the reactor core shall remain flooded with coolant for at least three days after a loss-of-coolant accident even if its operators take no action at all.

Another reactor with passive

shutdown is removed by convention.

Passive safety features promise to simplify greatly the overall plant design. According to EPRI, the AP600 will need 60 per cent fewer valves, 60 per cent less pipework, and 80 per cent less control cable. The idea is to build AP600s in large modules for transport by rail or barge, and rapid assembly at site.

Another reactor with passive

safety features is PIUS (process inherent ultimate safety), a Swedish design now being promoted by the ABB Atom, the ASEA-Brown Boveri joint venture. Claimed to be "insensitive to human errors and mistakes", PIUS uses a core of BWR fuel in a large pressure vessel of pre-stressed concrete, capable of keeping to core cool

for a week by evaporation alone. ABB Atom is seeking US Government support for design and development.

In Britain, Rolls-Royce and Associates, the company which has built more than 20 small pressurised water reactors for the Royal Navy, has been collaborating for the past year with the UK Atomic Energy Authority in the design of the safe integral reactor (SIR). This is a 320MW reactor concept that packs the entire PWR primary circuit inside a single very big pressure vessel.

The initial response from the US Department of Energy to the five-volume preliminary submission is that SIR meets the conditions for funding of the five-year design and development phase. The UK AEA has proposed that a full-sized demonstration of SIR should be built at its Winfrith establishment in Dorset, as a replacement for its 100MW prototype steam generating heavy water reactor, which it has run as a local power source for over 20 years.

with considerable nuclear engineering experience: Combustion Engineering and Stone and Webster. This spring the four partners submitted their ideas for SIR to the US Department of Energy for development money — up to \$50m — under its scheme to encourage development of reactors with passive safety features. In order to qualify, applicants — which include ABB Atom with PIUS — must show that they are willing to put up at least matching funds.

SIR uses a steel vessel of the same diameter as the Sizewell B pressure vessel and therefore needs no new pressure vessel technology, says Dr Brian Eyre, the UK AEA's board member for programmes. Moreover, the vessel will receive only about 1/10,000 of the radiation of the Sizewell B vessel because of the shielding from its steam generators and also the low rating of the Combustion Engineering core design. The once-through steam generators are simple and readily replaced.

SIR is intended to be built in about three years, half the time allowed for Sizewell B. Dr Eyre says that its advantages add up to a price per kilowatt that will match the PWR, four times its size, for single-series-ordered units, and beat it if built in pairs with a common turbo-generator.

The initial response from the US Department of Energy to the five-volume preliminary submission is that SIR meets the conditions for funding of the five-year design and development phase. The UK AEA has proposed that a full-sized demonstration of SIR should be built at its Winfrith establishment in Dorset, as a replacement for its 100MW prototype steam generating heavy water reactor, which it has run as a local power source for over 20 years.

Another reactor with passive

safety features is PIUS (process inherent ultimate safety), a Swedish design now being promoted by the ABB Atom, the ASEA-Brown Boveri joint venture. Claimed to be "insensitive to human errors and mistakes", PIUS uses a core of BWR fuel in a large pressure vessel of pre-stressed concrete, capable of keeping to core cool

for a week by evaporation alone. ABB Atom is seeking US Government support for design and development.

In Britain, Rolls-Royce and Associates, the company which has built more than 20 small pressurised water reactors for the Royal Navy, has been collaborating for the past year with the UK Atomic Energy Authority in the design of the safe integral reactor (SIR). This is a 320MW reactor concept that packs the entire PWR primary circuit inside a single very big pressure vessel.

The initial response from the US Department of Energy to the five-volume preliminary submission is that SIR meets the conditions for funding of the five-year design and development phase. The UK AEA has proposed that a full-sized demonstration of SIR should be built at its Winfrith establishment in Dorset, as a replacement for its 100MW prototype steam generating heavy water reactor, which it has run as a local power source for over 20 years.

Another reactor with passive

safety features is PIUS (process inherent ultimate safety), a Swedish design now being promoted by the ABB Atom, the ASEA-Brown Boveri joint venture. Claimed to be "insensitive to human errors and mistakes", PIUS uses a core of BWR fuel in a large pressure vessel of pre-stressed concrete, capable of keeping to core cool

for a week by evaporation alone. ABB Atom is seeking US Government support for design and development.

In Britain, Rolls-Royce and Associates, the company which has built more than 20 small pressurised water reactors for the Royal Navy, has been collaborating for the past year with the UK Atomic Energy Authority in the design of the safe integral reactor (SIR). This is a 320MW reactor concept that packs the entire PWR primary circuit inside a single very big pressure vessel.

The initial response from the US Department of Energy to the five-volume preliminary submission is that SIR meets the conditions for funding of the five-year design and development phase. The UK AEA has proposed that a full-sized demonstration of SIR should be built at its Winfrith establishment in Dorset, as a replacement for its 100MW prototype steam generating heavy water reactor, which it has run as a local power source for over 20 years.

Another reactor with passive

safety features is PIUS (process inherent ultimate safety), a Swedish design now being promoted by the ABB Atom, the ASEA-Brown Boveri joint venture. Claimed to be "insensitive to human errors and mistakes", PIUS uses a core of BWR fuel in a large pressure vessel of pre-stressed concrete, capable of keeping to core cool

for a week by evaporation alone. ABB Atom is seeking US Government support for design and development.

In Britain, Rolls-Royce and Associates, the company which has built more than 20 small pressurised water reactors for the Royal Navy, has been collaborating for the past year with the UK Atomic Energy Authority in the design of the safe integral reactor (SIR). This is a 320MW reactor concept that packs the entire PWR primary circuit inside a single very big pressure vessel.

The initial response from the US Department of Energy to the five-volume preliminary submission is that SIR meets the conditions for funding of the five-year design and development phase. The UK AEA has proposed that a full-sized demonstration of SIR should be built at its Winfrith establishment in Dorset, as a replacement for its 100MW prototype steam generating heavy water reactor, which it has run as a local power source for over 20 years.

Another reactor with passive

safety features is PIUS (process inherent ultimate safety), a Swedish design now being promoted by the ABB Atom, the ASEA-Brown Boveri joint venture. Claimed to be "insensitive to human errors and mistakes", PIUS uses a core of BWR fuel in a large pressure vessel of pre-stressed concrete, capable of keeping to core cool

for a week by evaporation alone. ABB Atom is seeking US Government support for design and development.

In Britain, Rolls-Royce and Associates, the company which has built more than 20 small pressurised water reactors for the Royal Navy, has been collaborating for the past year with the UK Atomic Energy Authority in the design of the safe integral reactor (SIR). This is a 320MW reactor concept that packs the entire PWR primary circuit inside a single very big pressure vessel.

The initial response from the US Department of Energy to the five-volume preliminary submission is that SIR meets the conditions for funding of the five-year design and development phase. The UK AEA has proposed that a full-sized demonstration of SIR should be built at its Winfrith establishment in Dorset, as a replacement for its 100MW prototype steam generating heavy water reactor, which it has run as a local power source for over 20 years.

Another reactor with passive

safety features is PIUS (process inherent ultimate safety), a Swedish design now being promoted by the ABB Atom, the ASEA-Brown Boveri joint venture. Claimed to be "insensitive to human errors and mistakes", PIUS uses a core of BWR fuel in a large pressure vessel of pre-stressed concrete, capable of keeping to core cool

for a week by evaporation alone. ABB Atom is seeking US Government support for design and development.

In Britain, Rolls-Royce and Associates, the company which has built more than 20 small pressurised water reactors for the Royal Navy, has been collaborating for the past year with the UK Atomic Energy Authority in the design of the safe integral reactor (SIR). This is a 320MW reactor concept that packs the entire PWR primary circuit inside a single very big pressure vessel.

The initial response from the US Department of Energy to the five-volume preliminary submission is that SIR meets the conditions for funding of the five-year design and development phase. The UK AEA has proposed that a full-sized demonstration of SIR should be built at its Winfrith establishment in Dorset, as a replacement for its 100MW prototype steam generating heavy water reactor, which it has run as a local power source for over 20 years.

Another reactor with passive

safety features is PIUS (process inherent ultimate safety), a Swedish design now being promoted by the ABB Atom, the ASEA-Brown Boveri joint venture. Claimed to be "insensitive to human errors and mistakes", PIUS uses a core of BWR fuel in a large pressure vessel of pre-stressed concrete, capable of keeping to core cool

for a week by evaporation alone. ABB Atom is seeking US Government support for design and development.

In Britain, Rolls-Royce and Associates, the company which has built more than 20 small pressurised water reactors for the Royal Navy, has been collaborating for the past year with the UK Atomic Energy Authority in the design of the safe integral reactor (SIR). This is a 320MW reactor concept that packs the entire PWR primary circuit inside a single very big pressure vessel.

The initial response from the US Department of Energy to the five-volume preliminary submission is that SIR meets the conditions for funding of the five-year design and development phase. The UK AEA has proposed that a full-sized demonstration of SIR should be built at its Winfrith establishment in Dorset, as a replacement for its 100MW prototype steam generating heavy water reactor, which it has run as a local power source for over 20 years.

Another reactor with passive

safety features is PIUS (process inherent ultimate safety), a Swedish design now being promoted by the ABB Atom, the ASEA-Brown Boveri joint venture. Claimed to be "insensitive to human errors and mistakes", PIUS uses a core of BWR fuel in a large pressure vessel of pre-stressed concrete, capable of keeping to core cool

for a week by evaporation alone. ABB Atom is seeking US Government support for design and development.

In Britain, Rolls-Royce and Associates, the company which has built more than 20 small pressurised water reactors for the Royal Navy, has been collaborating for the past year with the UK Atomic Energy Authority in the design of the safe integral reactor (SIR). This is a 320MW reactor concept that packs the entire PWR primary circuit inside a single very big pressure vessel.

The initial response from the US Department of Energy to the five-volume preliminary submission is that SIR meets the conditions for funding of the five-year design and development phase. The UK AEA has proposed that a full-sized demonstration of SIR should be built at its Winfrith establishment in Dorset, as a replacement for its 100MW prototype steam generating heavy water reactor, which it has run as a local power source for over 20 years.

Another reactor with passive

safety features is PIUS (process inherent ultimate safety), a Swedish design now being promoted by the ABB Atom, the ASEA-Brown Boveri joint venture. Claimed to be "insensitive to human errors and mistakes", PIUS uses a core of BWR fuel in a large pressure vessel of pre-stressed concrete, capable of keeping to core cool

for a week by evaporation alone. ABB Atom is seeking US Government support for design and development.

In Britain, Rolls-Royce and Associates, the company which has built more than 20 small pressurised water reactors for the Royal Navy, has been collaborating for the past year with the UK Atomic Energy Authority in the design of the safe integral reactor (SIR). This is a 320MW reactor concept that packs the entire PWR primary circuit inside a single very big pressure vessel.

The initial response from the US Department of Energy to the five-volume preliminary submission is that SIR meets the conditions for funding of the five-year design and development phase. The UK AEA has proposed that a full-sized demonstration of SIR should be built at its Winfrith establishment in Dorset, as a replacement for its 100MW prototype steam generating heavy water reactor, which it has run as a local power source for over 20 years.

Another reactor with passive

safety features is PIUS (process inherent ultimate safety), a Swedish design now being promoted by the ABB Atom, the ASEA-Brown Boveri joint venture. Claimed to be "insensitive to human errors and mistakes", PIUS uses a core of BWR fuel in a large pressure vessel of pre-stressed concrete, capable of keeping to core cool

for a week by evaporation alone. ABB Atom is seeking US Government support for design and development.

In Britain, Rolls-Royce and Associates, the company which has built more than 20 small pressurised water reactors for the Royal Navy, has been collaborating for the past year with the UK Atomic Energy Authority in the design of the safe integral reactor (SIR). This is a 320MW reactor concept that packs the entire PWR primary circuit inside a single very big pressure vessel.

The initial response from the US Department of Energy to the five-volume preliminary submission is that SIR meets the conditions for funding of the five-year design and development phase. The UK AEA has proposed that a full-sized demonstration of SIR should be built at its Winfrith establishment in Dorset, as a replacement for its 100MW prototype steam generating heavy water reactor, which it has run as a local power source for over 20 years.

Another reactor with passive

safety features is PIUS (process inherent ultimate safety), a Swedish design now being promoted by the ABB Atom, the ASEA-Brown Boveri joint venture. Claimed to be "insensitive to human errors and mistakes", PIUS uses a core of BWR fuel in a large pressure vessel of pre-stressed concrete, capable of keeping to core cool

for a week by evaporation alone. ABB Atom is seeking US Government support for design and development.

In Britain, Rolls-Royce and Associates, the company which has built more than 20 small pressurised water reactors for the Royal Navy, has been collaborating for the past year with the UK Atomic Energy Authority in the design of the safe integral reactor (SIR). This is a 320MW reactor concept that packs the entire PWR primary circuit inside a single very big pressure vessel.

The initial response from the US Department of Energy to the five-volume preliminary submission is that SIR meets the conditions for funding of the five-year design and development phase. The UK AEA has proposed that a full-sized demonstration of SIR should be built at its Winfrith establishment in Dorset, as a replacement for its 100MW prototype steam generating heavy water reactor, which it has run as a local power source for over 20 years.

Another reactor with passive

safety features is PIUS (process inherent ultimate safety), a Swedish design now being promoted by the ABB Atom, the ASEA-Brown Boveri joint venture. Claimed to be "insensitive to human errors and mistakes", PIUS uses a core of BWR fuel in a large pressure vessel of pre-stressed concrete, capable of keeping to core cool

This advertisement appears as a matter of record only



Sterling Bank & Trust Limited

£75,000,000

Revolving Credit Facility

Lead Managers
The Nippon Credit Bank, Ltd.
The Royal Bank of Scotland plc

Managers
Dresdner Bank AG
The Long-Term Credit Bank of Japan, Limited
National Australia Bank Limited
The Saitama Bank, Ltd.

Participants
Charterhouse Bank Limited
ASL/CORF Bank, London Branch
Bank Julius Baer & Co Ltd

United Overseas Bank
Banque Unie pour les Pays d'Outre-Mer Geneva - London Branch

Facility Agent
Charterhouse Bank Limited

Arranged by
CHARTERHOUSE
A member of The Securities Association
The Royal Bank of Scotland Group

Arnault is step nearer to control of LVMH

By George Graham
in Paris

MR BERNARD Arnault, chairman of LVMH, won a victory yesterday in his war with Mr Henry Racamier, head of LVMH's Louis Vuitton subsidiary, for control of the French drinks and luxury goods group.

The French commercial court threw out the demand made by a number of LVMH's small shareholders, backed by Mr Racamier, for the amendment of shares held by Mr Arnault amounting to around a quarter of his 48 per cent stake in the company's capital.

Their suit had contested an issue of bonds with warrants by Moët Hennessy, the champagne and cognac company which merged with LVMH. Most of this issue, which had been criticised by the Commission des Operations de Bourse (COB), the French stock exchange regulator, had found its way into the hands of Mr Arnault.

Mr Philippe Grandjean, president of the Paris commercial court, said the warrants issue might have taken advantage of Moët Hennessy's shareholders, but refused to apply any changes made in the law since the deal was struck. He said he was happy if the case had prompted the COB to tighten up its rules.

Yesterday's verdict, which ends the freeze applied in May to the contested shares, is expected to be appealed.

Mr Arnault plans to use LVMH's 98 per cent control of Louis Vuitton to change the company's statutes at a shareholders' meeting which has been delayed by the court proceedings until September 15. He intends to oust Mr Racamier, 77.

INTERNATIONAL COMPANIES AND FINANCE

Union Texas gambles on gas

James Buchan on the diversification plans of a US oil independent

Mr Clark Johnson, chairman of Union Texas Petroleum, is a businessman in a hurry. A burly Pennsylvanian who has been the second largest US independent since 1986, he is racing to add gas reserves and petrochemicals capacity to take Union Texas into the 1990s.

Though Union Texas is as deep in debt as anybody else in its home town of Houston, it will spend \$20m on drilling for gas this year in the Gulf of Mexico alone.

And it has offered contractors at its ethylene plant in Louisiana a whopping profit-sharing deal if they can bring in a 38 per cent expansion of the plant by the last day of the year.

It does not matter to Mr Johnson that the price of gas is down 40 per cent from its peak in 1983 and markets for ethylene, the key component in hundreds of chemicals and plastics, have begun to weaken after a very strong 1988. "In commodity markets, you can't wait for the price to go your way," says Mr Johnson. "You have to be ahead of the game."

This will not be easy. Now that the mainland US has been worked over for its oil reserves, the independent companies and such majors as Amerada Hess are betting their future on the gas at the "clean" fuel of the future for US industry and households. And big companies such as Phillips Petroleum, Dow Chemical and Quantum Chemical are building new ethylene crackers.

In its race to get ahead, Union Texas has had a bad handicap. For years a subsidiary of Alford-Signal, the New Jersey conglomerate, Union Texas was loaded up with \$1.5bn in junk bonds and preferred stock.

The result was that earnings by Kohlberg Kravis Roberts, the Wall Street investment firm in a partial leveraged buy-out in 1986.

Union Texas managed to raise \$20m in equity by selling 20 per cent of the company to the public in a share offering in 1987. But the company remains heavily indebted: it must shell out \$15m a year to service its debt and preferred stock, which is the equivalent of all the after-tax income from Union Texas' North Sea interests.

Despite this burden, Union Texas - the largest US independent after Occidental Petroleum - has been as successful as any US oil company.

But Union Texas faces some

years business for growth.

In Indonesia, where Union Texas has an interest alongside Ultramar of the UK in the highly productive East Kalimantan concession, the company can supply growing demand for liquefied natural gas from Japan and its fast-growing neighbours.

The ethylene plant, which is at Geismar, near Baton Rouge in Louisiana, shipped in record profits of \$30m last year with average sales prices doubling to 28.5 cents a lb. So far this year, the price has weakened a few cents in response to falling demand for plastics from the sluggish motor industry and the prospect of the new capacity.

But Union Texas will certainly beat the pack with its 300m lb expansion at Geismar and says it will still make good money if the price falls to the mid-20s in cents.

The key to success lies in the Gulf of Mexico. Last year, Union Texas sharply increased exploration and had a bumper year, with 10 out of 17 exploratory wells turning up gas. Production this year will probably be twice the 90m cu ft of 1986 and triple the 1987 figure.

But the industry is still plagued by a surplus of deliverable supply, the legacy of heavy exploration in the early 1980s when energy prices were going through the roof.

Many Texans, from drilling wildcatters to company men such as Mr Johnson, are betting that growing anxiety about pollution will switch many industrial and utility users over to gas and cause the price to rise. But it is a gamble.

"There's just one thing that bothers me," says Mr Johnson with a chuckle. "We can't all be right."

UNION TEXAS PETROLEUM

	1986	1987	1988
Net income*	\$80.3	\$5.3	(\$7.4)
Revenues	\$1,200	\$1,200	\$1,270
Net debt	\$202	\$22	\$20.1
Net worth	\$71.7	\$50.7	(\$62.7)
Gas reserves*	1,000m	1,000m	1,000m

*in millions of dollars. Figures in brackets indicate a loss. **in billions of cubic feet of gas.

in finding oil and gas to replace what it produces.

The company, which has only a quarter of its business in the US and the rest in the UK North Sea, Pakistan and Indonesia, increased its reserves last year to 900m barrels of oil equivalent at a finding cost, Mr Johnson says, of little more than \$5 a barrel.

Last July's catastrophic platform explosion in the Piper field, where Union Texas has a 20 per cent interest, might have destroyed the company but for Mr Johnson's large Alford-Signal, the New Jersey conglomerate, Union Texas was loaded up with \$1.5bn in junk bonds and preferred stock.

In its race to get ahead, Union Texas has had a bad handicap.

For years a subsidiary of Alford-Signal, the New Jersey conglomerate, Union Texas was loaded up with \$1.5bn in junk bonds and preferred stock.

Union Texas faces some

Gestetner bids for Hanimex

By Chris Sharwell, Vanessa Houlder and Our Wellington Correspondent

GESTETNER, the US office equipment group, yesterday announced a complex \$145.2m (US\$102.7m) offer to buy Hanimex, an Australian photographic and imaging equipment distributor, from Chase Corporation, a New Zealand property and investment company.

This came as the New Zealand Government stepped in at the behest of Chase, freezing its NZ\$1.3m (US\$74.6m) portfolio of local property interests.

Statutory managers are being appointed for its property business and an outside financial adviser to its main board.

The move stops just short of appointing a government receiver to Chase itself.

The group's assets have plunged as a result of its failure to meet a June 30 deadline for the sale of key assets and the persistently grim outlook in the New Zealand property market.

The offer for Hanimex, at \$2.43 per share, is below recent market levels, and substantially below the \$3.75 to \$4.25 range mooted by Salomon Brothers earlier this year when Chase put it up for sale.

Gestetner plans to finance the acquisition through a mixture of borrowings and the con-

tinued challenges down the road. Beginning in 1992, the company must find some \$500m over four years to reduce the junk bonds issued to finance the leveraged buy-out.

In 1993 and 1994, it will probably have to redeem some \$275m in preferred stock.

Allied-Signal also has the right then to buy \$200m in stock at a fraction of its market value, which will dilute shareholders' earnings. Mr Johnson is under pressure to build Union Texas large enough to absorb these costs.

Until the Piper field is redeveloped, Union Texas will depend on its Indonesian and US gas operations and its eth-

Lazard Frères forms European buy-out fund

By Charles Batchelor

version of some of the loan stock held by AFP Group.

AFP, which now owns 12.5 per cent of Gestetner, would increase its stake to 25 per cent if it fully converted its loan stock and exercised its options.

Mr Melgaard said that Gestetner was still seeking at least one more large acquisition.

The company plans to double its current size through merging with service or distribution businesses serving a similar customer base.

The disposal was one of a set of measures announced by Chase.

AFP was also said to have agreed to buy Chase's holding of shares and options in Reli Corporation. Chase's 86 per cent-owned subsidiary through which it controls Wormald, the fire protection group.

The consideration would be \$46.4m in cash, equivalent to \$12.50 per share. Chase said it also had an offer of 18 cents per share for its holding in mining group AIRL.

Chase shares closed 2 cents down at 11 cents on the New Zealand stock market before the announcement. Earlier this year they had traded above NZ\$1.

The new fund has the backing of 28 European investors including French banks, such as BNP and Credit National, and French insurers, such as Axa-Midi and UAP.

Other investors include GE Capital Corporate Finance Group of the UK, Dresdner Bank of Germany, an Italian insurer, and Sofina, a Belgian industrial holding company. Sixty-five per cent of the funds have come from French investors.

Fonds Parisiens will invest up to 10 per cent of its funds or \$17.5m (\$7m) in any one transaction though the equity financing will be used as a basis for raising mezzanine finance and loans.

The consortium of investors was put together in the relatively short time of just three months and Lazard is already looking at two transactions which might be financed by the fund. Management buy-outs have grown in popularity in continental Europe in recent years, with France and the Netherlands the centre of most activity.

Vitamin retailer deal

GENERAL Nutrition, the largest US specialty retailer of vitamins, has approved an offer from Thomas H. Lee, a Boston-based private investment firm, AP-DJ reports. The deal involves a cash tender offer at \$11.50 a share for up to 30,000,016 shares.

Bankers Trust Company, London

Agent Bank

The Kingdom of Thailand U.S. \$85,000,000

Floating Rate Capital Notes due 2000

In accordance with the provisions of the Notes, notice is hereby given that the Rate of Interest for the second three months of the Interest Period ending on 29th September, 1989 has been fixed at 9% per annum. The interest accruing for such a three-month period will be U.S. \$235.40 in respect of the U.S. \$5,000 denomination and U.S. \$1,769.37 in respect of the U.S. \$250,000 denomination and will be payable together with the interest for the first three months of the said Interest Period on 29th September, 1989 against surrender of Coupon No. 11.

Bankers Trust Company, London

Agent Bank

Republic of Venezuela

up to U.S. \$350,000,000

Floating Rate Notes Due 1995

In accordance with the terms and conditions of the Notes, notice is hereby given, that the interest rate for the Interest Period from 30th June, 1989 to 29th December, 1989 is 10 1/4% p.a. The Coupon Amount payable on the 29th December, 1989 for notes of U.S. \$10,000 and U.S. \$100,000 is U.S. \$527.67 and U.S. \$5,276.74 respectively.

Bankers Trust Company, London

Agent Bank

CRAVATH, SWAINE & MOORE

ANNOUNCES THE RELOCATION
OF ITS LONDON OFFICE

TO

33 KING WILLIAM STREET
10TH FLOOR
LONDON EC4R 9DU

TELEPHONE: 01-606-1421

TELEX: 8814901

FACSIMILE: 01-860-1150

CH/MS/150

INTERNATIONAL COMPANIES AND FINANCE

Boots shakes off 'dependable but dull' tag

Maggie Urry on the background to the UK retail chemist's bid for Ward White

Boots' directors cannot remember the last time the retail chemist and pharmaceutical group launched a hostile bid. Even Mr Philip Birch, chairman of Ward White, the victim of yesterday's £300m (\$1.26bn) offer from Boots, was surprised when he heard who had been buying his company's shares. "One does not associate Boots with aggressive bids," he remarked.

The offer for Ward White marks a significant change in culture at Boots and a bid to enter completely new areas of retailing, notably do-it-yourself (DIY) and car spares.

Boots used to be regarded as a dependable but dull company. Growth when it came was largely through the group's internal efforts.

In the early 1970s stores were mooted for both Boots of Fraser and Glaxo, but both were referred to the Monopolies and Mergers Commission. More recently, agreed deals have been done: the controversial purchase of Flint, the US pharmaceutical business, in 1986 and in January this year, the takeover of Underwoods, the London-based chemist chain.

But there has been a "quiet revolution" going on at Boots for some time, which was revealed by Mr Robert Gunn, the chairman, when he announced an unexpectedly large rise in the group's latest

annual profits last month. The retail side of the group, once run by the pharmacists who made up the prescriptions, has developed retailing skills which have enabled a strong improvement in retail margins.

In recent years there has been a very large programme of redesigning stores, focussing on key product areas, controlling costs and using electronic point-of-sale technology to improve stock control and to determine which products it was profitable to sell. All these have combined to increase sales.

Perhaps more important has been the drive to make managers more accountable, which required an overhaul of the store management structure.

And non-performing businesses have been more ruthlessly dealt with than in the past.

Most significant, though, was the arrival of Sir James Blyth as chief executive in October 1987 after he quit the managing director's job at Plessey. Although not the instigator of the shake-up, he was introduced to pep up the business with a fresh and energetic approach.

The Ward White bid could not have happened without Sir James being there," suggests one analyst. But Sir James is only there because of a feeling within Boots that it ought to be taking this sort of action. Certainly the company has a

new air of confidence, reinforced by the rapid success the pharmacists who made up the prescriptions, has developed retailing skills which have enabled a strong improvement in retail margins.

But behind this new mood is another motive. Boots' businesses are now throwing off cash and it could be seen as a bid target itself, if it did not have something new to invest in. Pharmaceutical companies are too expensive to buy, but retailers come cheaper.

Payless, with third place in the DIY market league table, has the best financial ratios of any of the major players – a fact which Boots readily concedes and which Mr Birch claims as a defence counter.

As well as cash for investment, Boots reckons it can insert into Ward White its mass market merchandising expertise, its know-how in technology and systems, its understanding of the retail property market and its warehousing and distribution skills.

But the main plank of Boots attack on Ward White is that it "lacks strategic direction". It is a charge to which Mr Birch pleads a firm not guilty, although to outsiders it has sometimes been hard to discern what the strategy is.

Ward White's origins are in a shoe business called John White, the board of which Mr Birch joined in 1970. He was there when a series of deals were done in the footwear sector, including the purchase of George Weston in 1976.

In 1980 Mr Birch became chairman and soon launched the group on an acquisition spree – in that sense its culture could not be more different.

In the UK, Boots reckons Ward White's Halfords chain,

the car parts, servicing and bicycle retailer, is already a well-managed business and expanding fast. Payless, the out-of-town DIY operator, and Stanley, the high street decoration chain, need more attention, Boots reckons.

Payless, with third place in the DIY market league table, has the best financial ratios of any of the major players – a fact which Boots readily concedes and which Mr Birch claims as a defence counter.

As well as cash for investment, Boots reckons it can insert into Ward White its mass market merchandising expertise, its know-how in technology and systems, its understanding of the retail property market and its warehousing and distribution skills.

But the main plank of Boots attack on Ward White is that it "lacks strategic direction". It is a charge to which Mr Birch pleads a firm not guilty, although to outsiders it has sometimes been hard to discern what the strategy is.

Ward White's origins are in a shoe business called John White, the board of which Mr Birch joined in 1970. He was there when a series of deals were done in the footwear sector, including the purchase of George Weston in 1976.

In 1980 Mr Birch became chairman and soon launched the group on an acquisition spree – in that sense its culture could not be more different.

In the UK, Boots reckons Ward White's Halfords chain,

ent from the Boots of old. Halfords was the first big deal, in 1984, followed by a bid for Foster Brothers, the menswear chain, which failed; then came the successful purchase of Maynards, the toy retailer and confectionery group and of Owen Owen, a department store chain, in 1985; both Payless and LCP, a property group, were acquired in 1986, the latter being the owner of Whitlock.

There have been a number of disposals too, some of them fairly soon after acquisitions. The footwear businesses have all gone, as have the toy chain and Owen Owen.

In all this, Mr Birch says, Ward White was aiming to be an international speciality retailer. Critics suggest his main concern in selecting targets was not so much industrial logic as whether an acquisition could help keep profits rising, with much paper being issued on the way.

Whether by luck or judgement, though, Ward White has assembled what is now a fairly coherent group of businesses, some of which are clearly attractive.

Ironically Sir James, whose own background is in defence, is now in the attack, even if that is itself a form of defence. Mr Birch, usually on the aggressive side of a deal, is now the target.

Aerospatiale makes \$4.7m investment in ES2

By Alan Cane

AEROSPATIALE, the French aerospace group, has become the ninth company to invest in European Silicon Structures (ES2), the pan-European microchip manufacturer attempting to challenge US and Japanese dominance in semiconductors.

The other investors, who funded the formation of the company in 1985, include Saab Scania, British Aerospace, Groupe Bull, Philips and Asea Brown Boveri. Around \$100m was raised to start the company.

Aerospatiale is understood to have made its investment, valued at about \$25m (\$4.7m), to gain experience of a technology that it is finding increasingly crucial to its business. It has been a customer of ES2 for over two years.

ES2 designs and makes a special kind of silicon chip called an Application Specific Integrated Circuit (ASIC), customised to a client's exact requirements and produced in small production runs which conventional semiconductor companies would find uneconomical.

It uses a combination of computer-aided design techniques and electron beam technology to deliver products twice as quickly and cheaply as its competitors.

It is now building up manufacturing capacity at its American facility, US2, where its customers include Boeing Corporation, Hughes Aircraft and John Hopkins University. However, the European company will not break even until the latter part of next year, some way behind its initial expectations, and it is still looking for new partners to share the financial burden.

The company said last week that it expected to be able to announce a further investor later in the summer. It would be able to help its efforts in the West German market where it has been noticeably weak.

Nevertheless, ES2 delivered its 500th chip design to Bosch of West Germany in May and said it expected to deliver its 600th design next week.

Enimont and Orkem agree to 'swap' activities

By George Graham in Paris

ORKEM, the French state-owned chemicals producer, and Enimont, the Italian chemicals group formed from the state ENI group and most of the assets of the private-sector Montedison, have clinched an agreement to reinforce their respective product ranges by swapping activities.

Enimont will take control of Orkem's polyethylene activities on two sites in France, while the French company will take over Enimont's subsidiary Vedril, which produces acrylic glass at two sites in Italy and West Germany. The Italian company will also take a share in Orkem's petrochemicals plant in the French port of Dunkirk.

Vedril is estimated to be worth around \$120m, while the activities acquired by Enimont are valued at over \$200m, leaving the Italian company to pay Orkem the balance in cash.

"This is a very important deal because we are trying to build an industry on a European scale," said Mr Lorenzo Nucci, chairman of Enimont.

"We still think there are far too many competitors in Europe. We do not believe that in the years to come we can continue to have 18 producers of polyethylene or 17 producers of PVC."

Mr Nucci said that the disagreements between the Italian Government and Mr Raul Gardini, who controls Montedison, had been solved last week.

"Enimont's problem is entirely an industrial one, not a question of who will be its shareholders in three years or five years or ten years," he said.

Outokumpu, Ibercobre link

By Enrique Teissier in Helsinki

OUTOKUMPU Copper, part of Finland's state-owned Outokumpu group, has acquired a 51 per cent stake in the Spanish copper alloy semi-products company, Iberica del Cobre (Ibercobre).

Outokumpu claims the acquisition will turn it into Europe's second-largest producer of copper semi-manufactured products, lifting its output to 305,000 tonnes.

Benckiser returns DM119.7m profit

By Haig Simonian in Frankfurt

IN ITS first consolidated group results, Benckiser, the highly acquisitive West German detergents company, yesterday disclosed pre-tax profits of DM119.7m (\$60.6m) on sales of that rose by 15.4 per cent to DM1.49bn last year.

Adjusted for subsequent purchases and disposals, Benckiser's turnover rose by 25 per cent last year. Profits are harder to judge, as the company published its 1987 profits only on a domestic basis, with a DM2.5m pre-tax loss.

Net profits in 1988 jumped to DM71.5m from just DM63.1m in 1987, despite a steep increase to DM53.4m from DM12.7m in interest costs as a result of last year's takeovers.

Sales should reach DM2bn to DM2.5bn this year, according to Mr Peter Harf, Benckiser's chief executive. Mr Harf made no profits forecast for 1989, but said earnings in the first six months had already shown a "clear two-digit percentage increase." Worldwide turnover soared by 32 per cent to DM1.63bn in the first half.

That put Benckiser in a position to make further acquisitions in the European detergents business, with Italy, Spain and Portugal its main targets, he said.

However, he argued that the prices now being demanded by the decreasing number of acquirable companies in the business made an imminent

Portugal wins Ford deal

By Peter Wise in Lisbon

FORD Motor Company has reached an agreement with the Portuguese Government to invest more than \$130m in a plant producing car radios and other high-technology components. The project will create more than 1,700 jobs in an area of south of Lisbon.

Portugal overcame tough competition from Spain and Ireland for the contract, which represents the biggest foreign investment in Portugal since Renault opened a factory there 12 years ago. Ford's decision is a major boost to Portugal's persistent efforts to promote itself as a competitive location for high-technology investment.

The greenfield project will produce radios and other audio

components for Ford's car and truck production plants in Europe. Manufacturing is expected to begin in 1992 and full production should be reached by 1996. The investment will be made over seven years. Export earnings are expected to reach \$215m by 1993.

Government-funded training schools will produce 600 qualified technicians as well as skilled workers for the site. Other key components Portugal is offering include the building of special roads and providing energy plants.

It is understood that Ford's choice of Portugal reflects its success in cutting red tape and guaranteeing skilled labour.

State Bank of South Australia

(a statutory corporation constituted under the State Bank of South Australia Act, 1983)

¥35,000,000,000

Variable Coupon Guaranteed Notes Due 1996

unconditionally guaranteed by

The Treasurer of the State of South Australia

Issue Price 101% per cent.

Nomura International

Mitsui Trust International Limited

Paribas Capital Markets Group

Bank of Tokyo Capital Markets Group

Daiwa Bank (Capital Management) Limited

DKB International Limited

Mitsui Finance International Limited

FONDS PARTENAIRES

FF 1.8 billion

"Fonds PARTENAIRES" include:

Lazard Frères et Cie

BNP - UAP

GE Capital

Caisse Nationale de Crédit Agricole

Crédit Suisse

Dresdner Bank

AXA

Crédit National

Sofina

La Mondiale

Crédit Agricole Ile de France

G M F

Banque de Luxembourg

Generali

Riunione Adriatica di Sicurtà S.p.A.

Apicil

Le Continent (Insurance Group)

GPA-Vie

MACSF - MAVPS (UMAPS Group)

Mutualité Française

Sofaris

and various institutional and industrial investors.

"Fonds PARTENAIRES" will take equity participations in friendly transactions in industrial or financial companies located in Europe. These capital investments will be made principally in the following areas: leveraged buy-outs and management buy-outs.

INTERNATIONAL COMPANIES AND FINANCE

Lonrho likely to quiz Bond in court

By Raymond Hughes, Law Courts Correspondent

MR ALAN BOND, head of Australia's troubled Bond empire, is likely to be cross-examined in the High Court in London to find out which of his companies owns about 114m shares in Lonrho, the UK international trading conglomerate.

Lonrho is not satisfied that it has been given correct information about the true beneficial ownership of the shares, and has asked the court for an order freezing them.

The central issue is whether the shares are beneficially owned by Bond group companies or by companies in the Bell group, in which Mr Bond has a controlling interest.

Mr Bond has sworn an affidavit and is among witnesses that Lonrho has been given

leave by the court to cross-examine.

In the hearing, which began yesterday and is expected to last throughout this month, Lonrho is complaining about the answers it received to notices it served under section 212 of the Securities Act requiring information about Bond holdings of its shares.

Lonrho is claiming an order under section 454 of the Act imposing restrictions on dealings in the shares. It is the first time such a claim has come to trial.

At an earlier hearing Mr Bond and five of his companies undertook not to dispose of the shares, or any interest in them, pending the outcome of the trial. There was a proviso enabling the shares to be charged or transferred to

banks or financial institutions as security for the provision of finance.

The case originally related to 25m shares - 21.5 per cent of Lonrho's equity. Yesterday the court was told that, as a result of two bonus issues, the Bond interests now hold about 114m shares.

Mr William Stubbs, QC, for Lonrho, also told Sir Nicolas Browne-Wilkinson, Vice-Chancellor - the senior judge of the High Court Chancery Division

- that Lonrho had been told that 20.9m of the shares had been charged to Australian Industry Development Corporation. These were registered in the name of Hurstmore Finance, a wholly-owned subsidiary of Bond Corporation Holdings.

Other shares had earlier

been charged to American Express and Merrill Lynch.

Mr Stubbs said that the shares had been bought in two tranches in September and October last year. Initially it had been said that the purchaser was Hurstmore, but subsequently Lonrho had been told that the shares had been purchased by Bond Corporation Holdings and vested in Hurstmore.

Later it had been told that that information was given as a result of mistake and that the real purchaser of all the shares had been Bell.

"That was a very serious matter, because one of the objects of these sections is that there should not be a false market in a company's shares," Mr Stubbs said.

The hearing continues today.

BCH fails to repay loan on time

By Michael Murray in Hong Kong

BOND Corporation Holdings, the debt-laden Australian master company of entrepreneur Mr Alan Bond, has failed to pay back the first part of a HK\$40m (US\$6.3m) loan from Bond Corporation International (BCI), the Hong Kong-listed subsidiary.

BCI directors have granted a one-week extension of the repayment date. Meanwhile the Hong Kong Stock Exchange has written to BCI seeking clarification of the reasons for the delay.

Recently the exchange asked for and received from BCI an

assurance that it would not enter into any more intra-group transactions without consulting its minority shareholders.

The loan, announced on May 25 and made to a wholly owned subsidiary of Bond Corporation, was to have repaid by June 30 out of a HK\$25m special dividend arising from the sale of the Bond Centre office building in Hong Kong.

About HK\$20m of the dividends is bound for the parent company which owns 65 per cent of BCI.

According to a BCI state-

ment yesterday, a delay arose because several Bond creditors were registered as shareholders pursuant to their charges over BCI shares, and the dividends were paid to them under the local Stamp Duties Ordinance.

Also, a portion of the subsidiary's dividend entitlement

"was remitted in error" to Bond Corporation Holdings, the statement said.

An extension has been granted until July 7 for the payment of HK\$20m still outstanding on the loan. Until then interest will continue to be charged at

Adler disposes of 14.9% holding in Goode Durrant

Hong Kong interbank offered rate plus 3 per cent.

BCI directors will meet on Thursday to consider a second special dividend arising from the Bond Centre sale. This, payable to all shareholders, would not require approval in a vote.

The 50 per cent stake in the building was sold for HK\$2.85m to SIE Development of Japan.

BCI said in the statement that its financial position is sound, that it has no immediate investment plans and that if it has surplus funds on hand,

Corona buys BIG stake from FAI Insurances

CORONA Corporation, a Canadian gold company, has bought a 7.4 per cent stake in US-based Bond International Gold (BIG) from FAI Insurances, Reuter reports from Perth.

It has also taken an option with Dahlhoff Investments, the unlisted Bond family company, to buy a further 20 per cent of BIG.

Corona paid US\$7.25 a share for 3.97m BIG shares on Friday. Mr Rodney Adler, FAI chief executive, said yesterday Corona will pay \$8.25 if it exercises its option. Mr Adler said that the Canadian company had also bought 730,000 BIG warrants at \$1.

Mr Michael Cross, managing director of Dahlhoff, which currently has a 38 per cent stake in BIG, had been looking for a premium of 15 per cent under Canadian rules. "We would have liked a better premium but we wanted a major gold producer on the board."

Mr Cross said that Bell Resources, itself 58 per cent owned by Bond Corporation Holdings, had taken out a put option on the Corona stake in BIG. Under the option Corona can ask Bell Resources to repurchase the BIG shares and warrants during the next 90 days.

He added that Corona had 60 days in which to commit itself to taking the additional stake.

Of the stake's relationship to the current BIG share price, he said: "We are only allowed a premium of 15 per cent under Canadian rules."

The Peat holding was the group's biggest UK investment, although FAI is believed to

retain several other small UK holdings of below the disclosure 5 per cent level.

The Goode Durrant shares have been acquired by Wimmedel, a Dutch registered company controlled by trusts associated with the Neesh family - which has a wide range of international property and industrial investments headed by Mr John Nash, an Englishman, the company has investments in Southern Africa - principally South Africa and Europe.

Wimmedel held 5.25 per cent before the purchase of the FAI stake, but was forced to place this holding to comply with Bank of England regulations before the deal with the Australian group went through.

The Goode Durrant has banking interests. Wimmedel would be prohibited by the Bank from taking more than 15 per cent of the capital without approval.

Oakbridge shares sold

MARUBENI and Toyo Menka, two Japanese trading houses, yesterday announced the acquisition of a 7.5 per cent interest each in Oakbridge, an Australian coal mining company, Kyodo reports from Tokyo.

This makes them the second largest shareholders of Oakbridge, behind Elders Resources, which has a 49 per cent stake.

The two Japanese companies acquired new Oakbridge shares from Bankers Trust Australia. These are part of shares issued by Oakbridge in taking over

coal mines from Elders Resources.

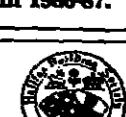
Marubeni and Toyo Menka said their total purchase price for the new Oakbridge shares was A\$16m (US\$7.6m) each.

Prior to the recapitalisation, Sumitomo Corporation had a 34.4 per cent interest and Sumitomo Metal Industries a 2.2 per cent stake of Oakbridge. These offer represents some 3.8 per cent of its expanded equity.

It said yesterday that the underwritten issue would comprise 120m new shares at the market price which rose Y25 on the Tokyo Stock Exchange in response to stand at Y815.

NKK is raising a further Y130bn through the domestic convertible bond market.

Profits of NKK, in line with the rest of the Japanese steel industry, have been rallying strongly since it dipped into the red in 1986-87.



HALIFAX BUILDING SOCIETY

£150,000,000

Floating Rate Loan Notes

Due 1996 (Series A)

Interest Rate 7.4000%

Interest Paid 30th June 1996

Interest Paid 30th December 1996

C. APRIL 1996

E. 55.70

55.70

Credit Suisse First Boston Limited

London



Mortgage Funding Corporation No 3 Plc

£120,000,000

Class C-1

£14,200,000

Class C-2

Mortgage Backed Floating Rate Notes

October 2023

For the interest period 3rd July, 1989 to 2nd October, 1989 the Class C-1 Notes will bear interest at 14.3625% per annum. Interest payable on 2nd October, 1989 will amount to £1,580.79 per £100,000.

Note: The Class C-2 Notes will bear interest at 14.3625% per annum. Interest payable on 2nd October, 1989 will amount to £15,452.40 per £14,200,000 Principal Amount.

Agent Bank

Morgan Stanley Trust Company of New York

London

US\$200,000,000

American Express Bank Ltd.

Floating Rate Subordinated Capital Notes

Due 1999

Principal Paying Agent

J.P. Morgan & Co.

A member of The Royal Bank of Canada Group

All of these securities having been sold, this advertisement appears as a matter of record only.

7,475,000 Shares

Class B Common Stock
(per value \$0.01 per share)

1,495,000 Shares

This portion of the offering was offered outside the United States by the undersigned.

Goldman Sachs International Limited

Banque Indosuez

Salomon Brothers International Limited

Morgan Stanley International

Nomura International
S. G. Warburg Securities

5,980,000 Shares

This portion of the offering was offered in the United States by the undersigned.

Goldman, Sachs & Co.

Bear, Stearns & Co. Inc. The First Boston Corporation Alex. Brown & Sons Dillon, Read & Co. Inc.
Donaldson, Lufkin & Jenrette Kidder, Peabody & Co. Lazard Frères & Co. Merrill Lynch Capital Markets
Montgomery Securities Morgan Stanley & Co. PaineWebber Incorporated Prudential-Bache Capital Funding
Salomon Brothers Inc. Shearson Lehman Hutton Inc. Smith Barney, Harris Upham & Co.
Wertheim Schroder & Co. Dean Witter Reynolds Inc. Avest, Inc. Allen & Company William Blair & Company
J. C. Bradford & Co. Dain Bosworth A. G. Edwards & Sons, Inc. McDonald & Company
Oppenheimer & Co., Inc. Piper, Jaffray & Hopwood Prescott, Ball & Turben, Inc.
The Robinson-Humphrey Company, Inc. Wheat, First Securities, Inc. Arnhold and S. Bleichroeder, Inc.
Robert W. Baird & Co. Bateman Eichler, Hill Richards Blunt Ellis & Loewi Boettcher & Company, Inc.
The Chicago Corporation Cowen & Co. Eppier, Guerin & Turner, Inc. First of Michigan Corporation
First Southwest Company Furman Selz Mager Dierz & Birney Grunthal & Co., Incorporated
Howard, Wolf, Labouisse, Friedrichs Interstate/Johnson Lane Johnston, Lemon & Co.
Ladenburg, Thalmann & Co. Inc. C.J. Lawrence, Morgan Grenfell Inc. Legg Mason Wood Walker
Needham & Company, Inc. Neuberger & Berman The Ohio Company Ragen MacKenzie
Rauscher Pierle Refnes, Inc. Raymond James & Associates, Inc. Stephens Inc. Stifel, Nicolaus & Company
Sutro & Co. Wedbush Morgan Securities AIBC Investment Services Corp. Bream Murray, Foster Securities Inc.
Daniels & Bell, Inc. D. A. Davidson & Co. First Manhattan Co. Gallagher Capital Corp. WR Lazard & Co.
Parker/Hunter Propp & Company, Inc. Pryor, Gowen, Counts & Co., Inc. Seidler Amdec Securities Inc.
Swergold, Cheifetz Van Kasper & Company Wessels, Arnold & Henderson

June, 1989

Montreal Trust Company of Canada acquires Corporate Trust Business of The Canada Trust Company

NOTICE is hereby given that on October 1, 1988 Montreal Trust Company of Canada acquired from The Canada Trust Company substantially all of its corporate trust business. Montreal Trust Company of Canada will succeed The Canada Trust Company as Trustee for the following issues of securities:

THE BANK OF NOVA SCOTIA¹²
U.S. \$200 million Floating Rate Debentures due 1994
BRAMALEA LIMITED¹³
U.S. \$75 million 11 1/2% Senior Debentures due 1992
CANADIAN OCCIDENTAL PETROLEUM LTD.¹⁴
CAN. \$64 million 12 1/2% Retractable Debentures due 1999
CANADIAN PACIFIC LIMITED¹⁵
CAN. \$75 million 10 1/2% Debentures due 1990
EURO-NEVADA MINING CORP. INC.¹⁶
U.S. \$8 million 6 1/2% Exchangeable Debentures due May 16, 1994
GAZ METROPOLITAIN INC.¹⁷
CAN. \$20 million 17 1/2% Debentures due 1990
CAN. \$40 million 14 1/2% Debentures due 1992
CAN. \$50 million 13 1/2% Debentures due 1994
CAN. \$30 million 10 1/2% Debentures due 1995
HUDSON'S BAY COMPANY¹⁸
U.S. \$75 million 10% Notes due 1991
CAN. \$80 million 10.75% Notes due 1991
U.S. \$50 million 10% Sinking Fund Debentures due 1994
CAN. \$60 million 10.5% Debentures due 1989
CAN. \$50 million 14.25% Notes due 1989
INCO LIMITED¹⁹
U.S. \$75 million 12% Notes due 1992
LOBLOW COMPANIES LIMITED²⁰
CAN. \$35 million 12 1/2% Debentures due 1990
CAN. \$75 million 10% Retractable Debentures Series 7 due 2001
CAN. \$30 million 11 1/2% Debentures due 1992

The Corporate Trust Department of Montreal Trust Company of Canada will administer the trusts respecting the above-mentioned issues at the office indicated below by the corresponding number:

1 Place Montreal Trust
1800 McGill College Ave.
Montreal, Quebec
H3A 3K9

15 King Street W.
Toronto, Ontario
M5H 1B4

411-8th Avenue S.W.
Calgary, Alberta
T2P 1E7

Montreal Trust

INTERNATIONAL CAPITAL MARKETS

French watchdog rebukes managers of mutual funds

By George Graham in Paris

THE COMMISSION des Opérations de Bourse (COB), France's stock market regulatory authority, has delivered a stinging rebuke to the managers of Sicav, or mutual funds.

In its annual report, published yesterday, the COB notes a large number of irregularities in the management of the Sicav it checked, and complains also of failings in the marketing of Sicavas by two major banks, BNP and CCF.

Paris financiers noted yesterday that the COB had carried out detailed checks on only 11 of France's 772 Sicavas, but that six of these were guilty of at least one infraction of the law.

One fund, GH Matif, man-

aged first by Banque Arjel and then by Paluel Marmonier, broke the rules on four counts, including investing 26 per cent of its portfolio in the certificates of deposit of a single bank – two and a half times the legal limit – and running an illegal overdraft.

The COB report adds little detail on the major insider trading investigations it has carried out over the past year, including Pechiney and Société Générale.

Mr Jean Fargé, the commission's chairman, said that the investigation of share purchases by Société Générale was like a "bathyscaphe, which climbs slowly to the surface, stopping its decompression on the way. It is surrounded by

frogmen who do not have the same vision of this affair as the COB."

On the other hand, the COB contests Société Générale's handling of its own share purchases in Compagnie Générale d'Électricité, another company privatised under the last Government.

But Mr Fargé was also critical of the regulatory structure in which his own commission functions, attacking the "absence of Cartesianism" in its organisation. Noting that the COB had undergone eight reforms in the 22 years of its existence, the most recent just passed by parliament, he described it as "a Sartorian organism, whose existence precludes its essence."

US bonds outperform the rest

By Norma Cohen

INVESTORS who switched their funds into 10-year US Treasuries on January 1 saw returns for the first half of this year far outstrip the performance of any other leading government bond market.

Returns on Canadian government bonds were more modest but still impressive. "In the first half of this year, returns in North American bond markets beat those in all other markets hands down," said Mr Robert Thomas, chief international economist at Midland Montagu Research.

Meanwhile, UK government gilts performed dismally among longer maturities, although cash returns in sterling, at 8.6 per cent, were the second highest of any government bond market. Only Australian cash investments proved superior to those in the UK, with total returns of 8.3 per cent for the first half of this year.

But 10-year gilts, to a dollar-based investor, would have caused losses of 11.8 per cent since the start of the year, partly reflecting the sharp decline in the currency. To a domestic investor, 10-year securities would have yielded a paltry 3.5 per cent.

Bond yields for 10-year US securities have fallen more than 150 basis points to the

NORTH AMERICAN BOND MARKET RETURNS (%)						
Country	Cash	10-yr bond	10-yr bond (8 terms)	10-yr bond (5 terms)	10-yr bond (3 terms)	10-yr bond (2 terms)
US	4.9	11.9	11.9	31.4		
UK	8.6	3.5	-1.1	3.5		
Germany	3.0	2.4	-7.7	2.4		
Japan	2.3	-3.6	-10.9	-2.4		
France	4.4	4.4	-1.4	11.4		
Netherlands	3.1	-0.7	-10.5	5.5		
Canada	5.7	10.3	2.7	5.7		
Australia	2.8	1.8	-0.9	5.7		
Switzerland	2.7	-7.3	-17.2	-2.8		

Source: Midland Montagu Research

present 8.10 per cent since they started the year at 9.13 per cent. Bond prices in several currencies slumped sharply in early February, with yields on 10-year US Treasuries rising sharply to about 9.5 per cent. But even when returns are measured from the lower levels seen at the start of the year and before taking into account currency gains, returns on Treasuries this year total 11.8 per cent.

Sterling investors who switched the proceeds of their investments back into their own currency would have had gains of 31.4 per cent, according to Midland Montagu.

In addition to interest rate rises in European countries in the past six months, government bond markets outside North America pale when one considers the returns from the

strong dollar.

Mr Jim O'Neill, international economist at Swiss Bank Corp, pointed out that a D-mark investor who had switched to 10-year bonds on January 1 would have total returns of 20.5 per cent, doing only slightly worse than a Japanese investor who would have scored returns of 26 per cent.

Looking ahead, Mr Thomas forecasts that, for the remainder of 1989, North American bond markets will continue to outperform others, with the currency holding ground or gaining in a falling interest rate environment.

However, Mr Thomas suggests that the largest capital gains in North American markets will come in cash investments, which, given the inverted yield curve, already offer handsome returns.

■ WEAKENED by some profit-taking and a lower dollar,

Marubeni launches two issues worth \$1.5bn

By Katherine Campbell

THE TOKYO stock market may have passed one of its quietest days for a long time, with a paltry turnover of just 200m shares, but this did not dampen Japanese equity-related Eurobond activity later in the day, when a total of \$1.75bn worth of dollar bonds with warrants attached was absorbed into the market.

The vast majority was for Marubeni, a trading company, which launched two issues for

NEW INTERNATIONAL BOND ISSUES						
Borrower	Amount m.	Coupon %	Price	Maturity	Fees	Book runner
US DOLLARS						
Marubeni Corp.	700	(5)	100	1994	2 1/2	Yamachii Int. (Europe)
Marubeni Corp.	500	(4 1/2)	100	1993	2 1/2	Daiwa Europe
Marubeni Corp.	300	(4)	100	1993	2 1/2	HSBC
Marubeni Corp.	200	(5)	100	1994	2 1/2	Nikko Secs. (Europe)
Gakken Co.(d/b/a)	100	4 1/2	100	1993	2 1/2	Yamachii Int. (Europe)
D-MARSH						
FINNISH EXPORT CREDIT(d/b/a)	(a)	15	100	1991	11 1/2	Merrill Lynch Bank
SWISS FRANC						
Otchayashi Food Con.(b/y/k/s)	70	5	100	1993	1 1/2	Nomura Bank(Switzerland)
YEN						
POWER Co.(d/b/a)	500	100-10	1994	20/10p	LTCB Int.	

■ Private placement. ■ With equity warrants. ■ Convertible. ■ Floating rate notes. ■ Fixed zeros. ■ Issue amount not yet decided. ■ Redemption cut to Fester/DM exchange rate at maturity. ■ Coupon cut by 1% from indication. Yield to put 4.076%. ■ Coupon cut by 3% from indication. ■ Bid less 50bp yen/yen 5-year swap rate.

■ International Bonds

a total of \$1.5bn. The four-year deal was a global issue, with \$300m targeted towards the Asian market and \$200m for Europe, led respectively by Nikko Securities and Daiwa Europe.

The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank. The coupon, indicated at 5% per cent, was quoted by lead manager Rundshausen's lifting its ban on D-Mark bonds under five years to bring a two-year currency-linked deal for Finnish Export Credit.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

In Germany, Merrill Lynch took advantage of the Rundshausen lifting its ban on D-Mark bonds under five years to bring a two-year currency-linked deal for Finnish Export Credit.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of a 1/4 per cent discount to par, which firms later to

warrant bond, carrying the guarantees of Mizuho Bank.

■ The coupon, to be fixed on July 4, was indicated at 4% per cent. Early afternoon Nikko Securities were quoting a bid price of

صدى من الأصل



The most quotable initials in the world:
now on the Paris Stock Exchange, on July 6, 1989.

Issue price : FF 853 per share

YVES SAINT LAURENT

For more information, please ask for our free prospectus from our head office, Service de Presse, 5 avenue Marceau - 75116 PARIS - FRANCE.

UK COMPANY NEWS

Profits expand by 15% to £35m but caution given on year results FNFC in line with expectations

By David Waller

FIRST NATIONAL Finance Corporation, a company which straddles residential property development and consumer credit and thus could be expected to suffer from Mr Nigel Lawson's anti-inflation tactics, yesterday reported a 15 per cent increase in pre-tax profits for the six months to the end of April this year.

Profits for the half-year climbed from £20.54m to £25.08m, in line with City expectations. But the shares slipped against the trend of the market, mainly because of a cautious statement from the company to the effect that "prevailing economic conditions [were] not conducive to achieving equivalent growth for the full year".

Mr Richard Langdon, chairman, stressed that this did not mean that FNFC's profits

would be down on the £28.7m made in the year to the end of October 1988. It was just that the 15 per cent advance over the first half was not indicative of the rate of growth for the year as a whole, he said. Nevertheless, the shares dropped 4p to 234p.

Mr Langdon was emphatic that the company's business was counter-cyclical, insofar as some aspects would do well in an era of high interest rates, while others would do not so well. He pointed to the performance in the consumer credit division, where profits went up from £20.3m to £23.37m despite the surging cost of money.

The chairman explained that there had been a dramatic reduction in the volume of "first mortgage" business, where before FNFC might have lent £4m a week it was now

lending only half that. First mortgages describe all home loans when the lender has first charge over the house, not just loans to first time-buyers.

But this was offset by second mortgage business, where FNFC is a UK market leader and in loans for home improvement. In both cases, volumes were up over the period, reflecting a trend toward debt consolidation on the part of those who have borrowed too much on credit cards, a tendency to upgrade existing accommodation rather than move up the property ladder in the past.

FNFC's property division - evenly split between residential and commercial - reported profits up from £6.17m to £6.72m, with 70 or so houses sales completed. FNFC said that - contrary to expecta-

tions - prices and demand for residential properties had held up over the first half, although it looked unlikely that sales for the year would equal the 300 sold in 1987-88.

Commercial lending - mainly to small and medium-sized public companies - increased profits from £3.74m to £4.12m. FNFC said that the figure had benefited from higher interest rates, and that there was no apparent faltering of demand.

There was a £225,000 contribution from insurance broking whilst central interest costs rose from £1.88m to £2.36m. Earnings per share (fully diluted) climbed by 8.5 per cent from 13.5p to 14.5p, reflecting a tax charge up from 5.5p to 10p. The interim dividend is 4.5p, up from 3.5p.

See Lex

Carclo up to £9.17m but warns on margins

By Vanessa Houlder

CARCLO ENGINEERING yesterday announced a 13 per cent rise in pre-tax profits from £8.12m to £9.17m for the year to March 31.

Mr John Ewart, chairman, said that the current order book was similar to that of a year ago. However, he warned that profit margins had begun to reflect a more competitive environment which was making it difficult to pass higher costs onto customers.

In addition, SSAP 24 would increase the pension charge by about £1.4m in the current year, he said, depressing pre-tax profits by that amount.

Carclo's star performer was card clothing which increased profits 43 per cent to £3.66m as a result of improved manufacturing methods and good worldwide demand.

Profits in the wire division fell 11 per cent to £1.52m as a result of a first half loss at Brantons due to a delay in obtaining replacement parts. The loss was more than offset by a return to profit in the second half.

General engineering also increased profits by 11 per cent, to £1.85m, although margins dropped as a result of the higher copper price.

The Woodland division had flat profits of £2.66m, as a generally strong performance was offset by a move into loss by ESR, a vehicle replacement parts business. ESR's future is under review, said Mr Ewart.

Turnover increased from £101.32m to £108.78m. Earnings per share rose to 15.5p (13.5p). A recommended final dividend of 8.5p gives a total of 8.5p (7.5p).

COMMENT

Carclo has an uphill task this year. The economic uncertainty threatens to put pressure on its margins at the same time as it has to contend with SSAP 24 silencing pre-tax profits. Furthermore, having squeezed such an excellent result out of its mature card-clothing business, further efficiency advances may be harder to achieve. Thus, although Carclo has strong cash flow and a good spread of high margin businesses, it is hard to be enthusiastic about the shares. Analysts are estimating profits of about £25m this year, which would return Carclo to 1988-style earnings of 13.5p per share. That would put the shares - which yesterday confirmed this year's downward trend by falling 8p to 13.5p - on a p/e of 10. At that level, there may be better value elsewhere, although any downside should be limited by a prospective yield of over 8 per cent.

Danae Investment

Danae Investment Trust made net revenue of £514,044 (£446,121) for the year to May 31 1989. Earnings per share were 7.25p (6.30p) and the final dividend 4.125p (3.75p) making a total of 7.125p (6.30p).

In order to manage its wider

Plessey shares drop as hostile GEC/Siemens takeover falters

By Terry Dodsworth, Industrial Editor

SHARES in Plessey, the UK defence group, fell sharply yesterday when the company indicated that it might win its long period in which the share price has stood on around 230p in expectation of an offer bid from General Electric Company and Siemens of West Germany.

Despite this sudden change of sentiment by Plessey, after a long period in which the share price has stood on around 230p in expectation of an offer bid from General Electric Company and Siemens of West Germany.

If these were acceptable to GEC/Siemens, their preferred option would be to make a full bid for Plessey.

Nevertheless, Plessey executives indicated yesterday that the talks with GEC were going ahead smoothly in an amicable atmosphere, and there was a pronounced mood of optimism in the Plessey camp about the possibility of a deal.

The statement, along with confirmation from Siemens that it was involved in the discussions, sent the Plessey share price in a downward spiral as investors took a more pessimistic view over the possibility of a bid.

The statement, along with confirmation from Siemens that it was involved in the discussions, sent the Plessey share price in a downward spiral as investors took a more pessimistic view over the possibility of a bid.

The statement, along with confirmation from Siemens that it was involved in the discussions, sent the Plessey share price in a downward spiral as investors took a more pessimistic view over the possibility of a bid.

At the close of trading, Plessey's shares stood at 236p, down 17p on the day, and well below the price of 245p at which the GEC/Siemens consortium last bought stock in the market. GEC's shares

Although the Ministry of Defence, the main negotiating

partner for the consortium, has adopted a tough line on the undertakings, there is a strong possibility that it could have firm proposals on an agreement with the bidding consortium this week or next.

If these were acceptable to GEC/Siemens, their preferred option would be to make a full bid for Plessey.

Nevertheless, Plessey executives indicated yesterday that the talks with GEC were going ahead smoothly in an amicable atmosphere, and there was a pronounced mood of optimism in the Plessey camp about the possibility of a deal.

The MoD is also believed to prefer jettisoning the proposed takeover in favour of building another strong defence company in Britain to compete with GEC's Marconi subsidiary. In the past the Ministry has talked of creating "twin pillars" that would be capable of providing effective competition within the UK defence industry, while large enough to push through constructive alliances with overseas defence companies.

See Lex

Profits fall 55% to £5m at Hogg Robinson

THE EFFECTS of rising interest rates, particularly on the residential housing market, were blamed by Hogg Robinson for a fall into losses in the second half of the year ended March 31.

At six months, the travel, transport, financial and property services group reported an increase in pre-tax profits to £9.51m (£8.09m) but the full year showed a 55 per cent fall from £11.04m to £5m.

Much of the downturn was

attributed to property services where interim operating profits of £1.7m turned into a full-year loss of £2.2m. Directors said confidence in the market had been lacking since October and residential sales had fallen by up to 50 per cent.

Towards the end of the year Hogg sold 60 per cent of the division to Sun Alliance, the insurance group.

Other divisions remained in profit with the transport section achieving record operating

profits of £2.96m (£2.3m). Commercial air freight showed excellent growth, directors said, and the acquisition of Cargoways had added to its presence in this area.

Profit in the travel division fell to £3m (£6.7m). This was mainly due to a decline in the package holiday market caused by the squeeze on disposable income. In addition, financial services did not fulfil early promise and profits fell to £1.4m (£2.1m).

Hogg's shares lost 1p on the day to close at 145p.

Scottish & Newcastle questioned on Thistle

By Ray Bashford

THE STOCK Exchange yesterday contacted Scottish & Newcastle Breweries following several reports that the company was attempting to dispose of the Thistle hotel chain.

Mr Alick Rankin, S&N's chief executive, declined to comment on the reports but confirmed that the Stock Exchange had made inquiries in an attempt to clarify the situation after two weeks of speculation.

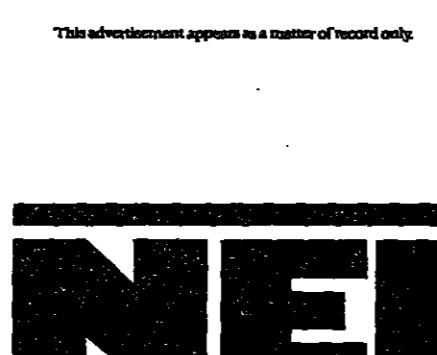
The company is expected to announce details today both of the planned Thistle deal and also another move into the le-

sure industry through the purchase of a controlling stake in Center Parcs, a Dutch leisure park operator. S&N has timed the Dutch deal to coincide with the announcement of its annual results.

Danae Investment

Danae Investment Trust made net revenue of £514,044 (£446,121) for the year to May 31 1989. Earnings per share were 7.25p (6.30p) and the final dividend 4.125p (3.75p) making a total of 7.125p (6.30p).

Dividends shown pence per share not except where otherwise stated. *Equivalent after allowing for scrip issue. **On capital increased by rights and/or acquisition issues. \$USM stock \$USUnquoted stock. #Third market. #For 15 months. *Gross.



NORTHERN ENGINEERING INDUSTRIES plc

is merging with

ROLLS-ROYCE plc

Financial advisor to NEI

ROBERT FLEMING & CO. LIMITED

FLEMINGS

INTERNATIONAL INVESTMENT BANKING

NEW YORK
SAN FRANCISCO

LONDON HONG KONG TOKYO SYDNEY
PARIS FRANKFURT BANGKOK TAIPEI MANILA SEOUL

25 Copthall Avenue, London EC2R 7DR Tel: 01-638 5858

Approved by Robert Fleming & Co. Limited, a member of The Securities Association and The International Stock Exchange.

Steetley takes Callet for £40m

Steetley, the UK aggregates company, is to buy 75 per cent of the Callet group, a family-owned French quarrying and ready mixed concrete business, for £28.5m (£23.5m).

The acquisition will reinforce the position of Steetley's French subsidiary Garon as the country's largest aggregates company. It coincides with a £20.7m share placing on the French market.

Mr David Donne, Steetley's chairman, said his company had been expanding rapidly in France over the last five years, and placing 4.75m shares at 435p demonstrated his commitment to the market.

Callet has interests in 29 quarries, 17 ready mixed concrete plants, six coated roadstone works and five prefabricated concrete works.

Mr Richard Miles, Steetley's managing director, said that the acquisition made his group, which had been neck and neck with Clements Francais, decisively the largest aggregates producer in France.

Callet made net profits of FF19.12m last year on sales of FF191.6m, and its net asset value is estimated at FF30.7m. Steetley is deferring payment for Callet's 75 per cent of the French business.

Steetley's board holds a major

ity of the voting A shares but the Kuwait Investment Office holds more than 90 per cent of the B shares and all of the £25m convertible issue. On conversion, these shares would dilute the board's holding of A shares to a minority.

According to GWR, the fall in profits was largely the result of a pricing dispute concerning one of its coal contracts and a fall in exceptional contributions from £2.02m to £254,000.

The offer coincided with the announcement of a sharp fall in pre-tax profits at GWR, from £7.4m (£4.8m) to £1.7m for the six months to March 31.

Mr Hockley-Sweeney confirmed that he had met Mr Pena and had made an offer but at a price less than the 160p per share quoted by Mr Pena.

He said that Aviva, which he took over at the end of 1988, and which earlier this year bought Viking Resources Trust, was "in good financial shape and definitely looking for acquisitions". But he said no general offer had been made to GWR's shareholders.

GWR's board holds a major

2 1/2 times share capital and reserves.

Reed also proposes to change its definition of share capital and reserves by writing back part of the goodwill if it has written off on acquisitions, and to allow cash deposits to be set against gross borrowings in determining borrowing levels.

Newgatway attacks rival on acceptances

By Nikki Tait

THE TEMPERATURE in the hotly contested bid battle for control of Newgatway cooled a little yesterday, as Wasserstein Perella and Great Atlantic & Pacific Tea Company, the US bidders, refrained from buying shares in the UK food retailer.

Instead they concentrated on attacking the level of acceptances notched up by its rival Isoscelles.

Newgatway, the US bid vehicle, initially noted "slipping support" for its rival, and said that Isoscelles, having claimed to speak for nearly 45 per cent, now owned or had acceptances for 41.7 per cent.

This was later corrected. In addition, parties acting in concert with Isoscelles managed, on a discretionary basis, another

2.4 per cent not yet assented to the offer.

Newgatway added a plea to these funds' trustees: if they felt its 242p-a-share cash offer was superior and if the management agreement permitted, they should instruct the managers to take the US offer.

Isoscelles is offering 230p a share in cash, but has a cash-and-paper alternative. If a Salomon Brothers' valuation of the paper element (undertaken for Newgatway Holdings) is accepted, this version is worth 245p to 250p, of which cash accounts for 215p.

Further details of the WP/A&P offer went on display. Under a management agreement, A&P would take on the preparation of budgets, operating and similar plans for the

Gateway chain. For the first three years, it would be reimbursed for out-of-pocket expenses and for the services provided by Mr Jim Wood, A&P's chief executive, and other A&P employees.

From the fourth anniversary of the purchase of Gateway shares, an annual cash fee of £2m would become payable to A&P.

The coupon on the £25m of junior subordinated debentures for which A&P is subscribing in Newgatway Holdings, is revealed to be 17% per cent.

Covenants between WP/A&P and its bankers - which are putting up £1.85m of loan facilities - give few clues about the expected progress of the company. Newgatway has not set out some covenants, includ-

ing those about interest cover, on the grounds that they are commercially sensitive.

Those that are revealed show that WP/A&P has covenanted that the trading margin - based on profits before interest and tax but after depreciation - will rise from at least 5 per cent in the year to April 1990 to 7.7 per cent in 1993/4 and thereafter. It has also set a capital expenditure limit of £55m in 1990/91, but this rises to £55m in 1993/94, and then increases steadily from £55m to £100m in the next five years.

Today, meanwhile, will see the formal announcement of Newgatway's figures for the year to April 29. They have already been forecast in detail as part of the group's defence.

UK COMPANY NEWS

Possible £51m offer for Prestwich

By Andrew Hill

PRESTWICH HOLDINGS, the disc group, is back in talks over a possible £51m offer for the company, six months after ending discussions about a management buy-out.

This time it is talking to a consortium led by Mr Mike Campbell, managing director of Strand Magnetics, Prestwich's video duplication and publishing subsidiary. Any offer would be made at 140p a share.

Prestwich said it had issued yesterday's announcement of discussions because of recent movement in the group's share price.

The shares stood at 112p at the beginning of last week and have since risen to 122p, climbing another 8p on yesterday's news to close at 130p.

Kleinwort Benson, the group's adviser, said it had not yet decided whether to ask for a stock exchange inquiry into share dealings.

Triplex makes components sale to Delta for £3m

By Richard Tomkins, Midlands Correspondent

Ownership of Brass & Alloy Pressings, a Birmingham-based manufacturer of non-ferrous components, has passed from one Midlands company to another with Triplex Lloyd's taking over the bulk of the business for £3m.

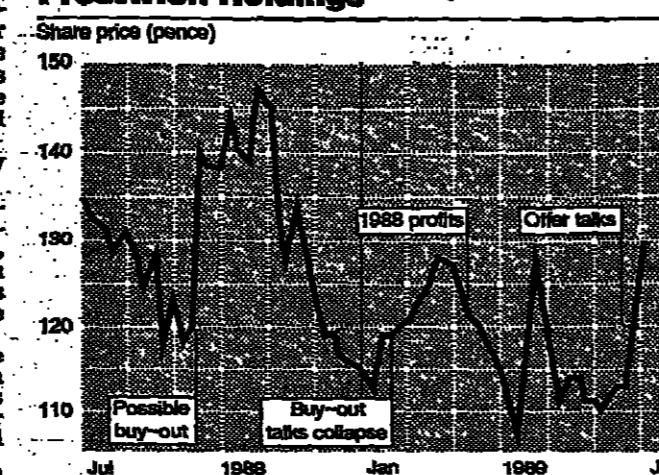
B&A supplies components for the aircraft industry, oil and gas, and general mechanical engineering. It made pre-tax profits of £25,000 on sales of £3.5m in the last nine months.

Triplex, a fast-growing foundries and engineering group, acquired the business less than six months ago as part of the quoted Christy Hunt group, which it bought for £3m.

However, Mr Jim Doel, Triplex's chief executive, said yesterday that B&A did not fit with company strategy.

Delta, the electrical equipment, engineering and industrial services group, said the acquisition would fit in with its existing British and American components companies and increase the group's international strength in non-ferrous forging.

Prestwich Holdings



In March the company announced a marginal improvement in pre-tax profits for the six months to end-December - from 84.05m to

SeaCon Bermudan legal battle delayed

By Andrew Hill

STRANA AND TIPHOOK'S Bermudan legal battle with Sea Containers, the ferry and container group, has been adjourned until Tuesday.

The Bermuda Supreme Court was due to begin hearing the preliminary legal issues of the case yesterday.

Strana, Swedish ferry operator, and Tiphook, the UK container rental company, are offering \$82.4m for Sea Containers, which is registered in Bermuda.

The court is being asked to decide whether Sea Containers broke Bermuda law by allowing its subsidiaries to buy about 20 per cent of the parent's shares in March and April. It will also consider the legality under Bermudan law of Sea Containers' "poison pill" shareholder rights plan.

If the supreme court's decision on the legal issues is inconclusive then the judge will have to hear further evidence from both sides. Should the court favour the Anglo-Swedish predators the subsidiary's purchases could be nullified, frozen or reversed.

The hostile bid has been extended in New York until midnight on July 14.

Pathfinders makes £0.5m

Pathfinders Group, specialist media and entertainment recruitment agency, reported pre-tax profits of £503,000 in the year to March 31. This is an 18 per cent increase on the £426,000 achieved in a 15-month period to the end of March 1988. Turnover at this USM quoted company rose to £2.02m, against £1.75m.

After tax had taken £175,000 (£153,000), earnings worked through at 1.87p (1.49p) per share. The directors have proposed a final dividend of 6.4p to make a 0.7p (0.282p) total.

Mr Stephen Worth, chairman, said that trading had generally been buoyant throughout the year although there had been a slowdown in the second half as raised interest rates led to cutbacks in staffing levels.

mentments not to tender their shares, all other tenders will be met in full.

Newarthill said it was using the tender to prevent the share price being destabilised by sales in the market. Moreover, some of the family members in question intended to expand their commercial property investment and development interests independent of the group.

The tender will allow certain members of the controlling McAlpine family to realise their 8.3 per cent holding of Newarthill's issued equity capital, which embraces both the ordinary shares and unquoted cash shares.

Because McAlpine family members holding 74.8 per cent of the equity have given com-

again in advance corporation tax. It said all of the ACT so incurred should be recoverable against mainstream tax.

Although many UK companies have bought their own shares in the market, Newarthill is only the second to use the tender method. International Business Communications (Holdings), the newsletter and conferences group, pioneered it earlier this year by buying in 40 per cent of its shares.

Preference shareholders must approve the plan, and Newarthill is proposing to raise the net dividend on these shares from 5.775 to 6.775 per cent.

FSM profits soar to £14.15m

By Peter Pearce

SHARES IN Ford Seller Morris Properties rose 8p to 116p yesterday after taxable profits at the property development and investment group soared to £14.15m in the year to April 30. This result compares with the £2.5m the USM quoted company made in the 15 months to end-April 1988. Turnover raced from £16.49m to

£22.82m. In the year net assets jumped from 50p to 129p per share and total property assets rose from £78m to £100m, an increase of 36 per cent.

Mr Irvine Seller, chairman, said that development activities had made a major contribution to the profits figure and added that FSM had a strong forward programme of about 2m sq ft which would form the base for profits in the current and subsequent years.

In June the company announced the proposed acquisition of fellow property group Brookmount. The agreed cash offer values the latter at £24m.

This represents a significant expansion for FSM which is capitalised at just £46m.

Net rental income from investment properties

All That Jazz directors snub Leslie Wise deal

By John Thornhill

LESLIE WISE Group, a textile company, has been unable to buy women's wear manufacturer All That Jazz after its directors changed their minds about the proposed sale.

All That Jazz - a private company - was not prepared to explain why its three directors had reversed their earlier decision.

In May, Leslie Wise announced that it had reached an agreement to buy All That Jazz subject to contract and

accountant's report. It had agreed to pay £2.8m with a further profit-related deferred payment of up to £1.25m.

Leslie Wise said at the time that one of the directors of All That Jazz would stay with the company and the other two would depart on completion of the acquisition.

Mr Leslie Wise, the chairman, said yesterday: "We are still looking for further acquisitions and there are a number of irons in the fire."

Lopex forges Yugoslav link

Alliance International, the advertising arm of Lopex, the communications group, has formed a trading link with Studio Marketing Delo, Yugoslavia's largest advertising company, writes John Riddick.

Under the deal, SMD will have exclusive rights to the Yugoslav business of Alliance's western clients and in return Alliance will receive business from any SMD clients seeking to advertise outside Yugoslavia.

The state ownership of Yugoslav companies meant that Alliance was unable to purchase an equity stake in SMD.

Canadian investor increases holding in Asda to 4.53%

By Nikki Tait

ASDA, Britain's fifth largest food retailer, yesterday announced the First City Financial Corporation has again raised its stake in the company, to 4.53 per cent.

First City, a Vancouver-based investment company controlled by the Belzberg family with a record of prominent Canadian-based takeovers, should Isocleses win - were 2p higher at 179p yesterday.

Board changes at Armstrong

By Clare Pearson

ARMSTRONG EQUIPMENT, industrial fasteners and engineering company in which Mr Swindall Paul's Caparo Group has recently increased its stake to 29.6 per cent, yesterday announced a number of board changes.

Mr Chris Davies, previously managing director of the fasteners division, is joining the main board as executive director responsible for UK operations.

With Caparo Group, the investment vehicle for Mr Paul, who chairs the engineering company Armstrong following the sale of the UK shock absorbers side, the announcement last Tuesday its stake has risen from 20.1 per cent. This triggered market hopes a takeover bid might be mounted.

Mr John Pratt, Armstrong's finance director, is now on holiday. The Armstrong spokesman said he understood Mr Paul was away also.

Mr Davies had been a director of the company for 18 years and was appointed to the board in 1986.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with Armstrong.

Mr Davies' replacement as managing director has already been arranged for Mr Brian Bearman, formerly distribution director, who resigned last Friday to pursue his own business activities after 20 years with

STRONG GROWTH PROFILE? SOUND MANAGEMENT STRUCTURE? BUT WHAT NOW?

Your company is successful. You are wholly independent, or an independently managed subsidiary. You've established your management framework and a good track record. So where do you go now?

Ironically, one of the most difficult tasks facing you is capitalizing on your own success.

The Growth & Development Programme at London Business School may provide the answer. It will help you maximise upon your strengths and plan for the next stages of your development.

THE GROWTH & DEVELOPMENT PROGRAMME

The GDP is intermittently structured. It takes place over 6 months, comprising 20 teaching days including 1 residential week. This avoids keeping you away from your office for long periods. But enables you to explore in your own company the strategic options afforded by your new-found skills.

The Growth and Development Programme begins on 5th February 1990 and places will be restricted to directors of companies which have demonstrated positive growth. For more information, and an application form, call Cathy Scott at London Business School's Centre for Enterprise on 01-724 8357.

LBS, Sussex Place,
Regent's Park, London
NW1 4SA.
Tel: 01-262 5050
Fax: 01-724 7875
Telex: 27461 LBS KOG

CENTRE FOR
ENTERPRISE

 LONDON BUSINESS SCHOOL

OUR 1989 RESULTS WILL GO DOWN JUST AS NICELY

- Greene King has now delivered increased profits and dividends per share to its shareholders for the last twenty-two consecutive years.
- The volume of beer sold by us was higher than last year, compared with a fall in beer sales nationally.
- Our increasing market share was spearheaded by our renowned ale brands, Greene King IPA Bitter and Abbot Ale, strongly supported by buoyant sales of Harp and Kronenbourg lagers.
- In the space of nine months, Lowes, our low alcohol bitter, has captured 26 per cent of the on-licensed, non and low alcoholic beer market covered by the Anglia Television area, thereby securing brand leadership.
- During the year seven major London pubs were acquired and placed under management, increasing our London pub estate to 14. Capital expenditure during the year exceeded £20 million.

Greene, King & Sons, plc



Dividends up for the 22nd year in succession

Year Ended 30.4.89

Profit Before Tax	£19.2m	+21%
Earnings Per Share	32.7p	+25%
Dividends Per Share	8.7p	+17%

Copies of the Annual Report will be available from the Company Secretary, Greene King & Sons plc, Westgate Brewery, Bury St Edmunds, Suffolk IP33 1QT from 15th July 1989.

Friendly
HOTELS PLC

1988 RESULTS

"Trading
eminently
satisfactory
to date"

RESULTS IN BRIEF	1988	1987	1986	1985
	£'000	£'000	£'000	£'000
TURNOVER	20,921	15,462	6,068	1,596
PROFITS BEFORE TAX	3,171	2,034	781	180
DIVIDENDS	2.7p	1.8p	1.2p	0.7p
EARNINGS PER SHARE	22.6p	14.9p	6.2p	2.2p

Substantial progress has been made in all areas of operations particularly the SERVICED OFFICES DIVISION. HOTELS now total thirteen, the FRIENDLY LODGE expansion is gathering pace, and four new Hotels and Lodges are under development or construction. FRENCH FRANKS enjoyed a record year. Our carefully laid plans for the expansion of CARE HOMES are now crystallising. The first FRIENDLY FLOATEL is due to open in the Autumn of 1989.

Friendly Hotels THE CREATORS OF COMFORT

For a copy of the latest Report and Accounts please apply to the Secretary, Friendly Hotels PLC, Premier House, 10 Greycoat Place, London SW1P 1SB.

UK COMPANY NEWS

Now, it's lighting-up time in Frankfurt

Clay Harris charts the course of Emess and Michael Meyer, its merchant adventurer

MERCHANT ADVENTURER is now unlikely ever to sell into the world's stock market. Listings. If Mr Michael Meyer had not pulled back from the brink a few years ago, it would have replaced Emess as the name of his UK light fittings and electrical accessories group.

In the event, Emess shunned Merchant Adventurer - the original name of one if its constituent companies - as too much of a mouthful. The idea lives on in its own way, however, in the stylized sextant which Emess adopted as its logo.

But if West German investors have missed a chance to ponder the eccentricities of British corporate nomenclature, Emess itself will soon be a much more familiar name to them.

On July 13, its shares begin trading in Frankfurt. Although hardly a titan with a stock market capitalisation of £12m, excluding convertible preference shares, Emess is far below the rest of most UK companies which have sought a Frankfurt listing. There are good reasons, however, for its initiative.

Mr Meyer, Emess' chairman, notes: "Germany is the leading European lighting market and arguably the leading world market in technical and design terms. We want to step up our activity there." Emess already does about a quarter of its business in Germany, mostly through its 77 per cent-owned subsidiary, Bremen-based Brillantleuchten.

The listing should also plug a stock market gap. Apart from Brillant, which has retained its listing, and one other small company, there are no "pure" lighting companies publicly quoted in Germany. Mr Meyer expects German institutions, which took Emess paper as he built the Brillant stake, initially to top up their holdings.

Heinan ran aground and was broken up in 1976, but Mr David Innes, now managing director of Authority Investments, recalls: "I always regarded him as someone who was going to go places. That's

although no new shares will be issued as part of the listing.

Emess will also be able to grant employee share options. Most important, however, will be its ability to offer locally traded equity as well as cash when it makes future acquisitions in West Germany. "This will give us an advantage that not many competitors have," Mr Meyer says.

This is unlikely to be idle talk, considering Emess' record and ambitions.

It has no European counterpart in the light fittings sector. On one side are the giant light-source manufacturers such as Philips, Siemens' Osram subsidiary (alone with GEC), Thorn EMI and GTE/Sylvania, for which fittings are not an adjunct to the main business.

On the other are the small to medium-sized fittings groups which have established reputations for leadership in design and technology. Their growth, however, and their ability to replicate Emess' consolidation of the fragmented market has been restrained by private ownership. Among the best examples are the West German trio Elico, Stahl and Hoffmeyer.

Although Mr Meyer is diplomatically coy in this regard, Emess has been talking to at least one of the three companies in recent months.

The Emess story is not quite one of rags-to-riches, but it comes as close as any does these days. Mr Meyer was recruited from South Africa at the age of 23 to become a management trainee for Heenan Beddoe, a UK conglomerate of the early 1970s. He arrived in London in 1973 with 2400.

Heinan ran aground and was broken up in 1976, but Mr David Innes, now managing director of Authority Investments, recalls: "I always regarded him as someone who was going to go places. That's

why we brought him from South Africa."

Just before Heenan's death throes, Mr Meyer and a partner, Mr Grenville Payne, borrowed heavily and bought out a company where the only assets were injection moulds.

With the proceeds of the disposal of these only a year later, they bought Emess Lighting, a small fittings manufacturer which made profits of £25,000 on sales of £500,000.

Emess' German links go back this far, as its original products incorporated German-made glass shades. Mr Meyer and Mr Payne concentrated on margins, kept debt at a minimum and avoided squandering scarce resources on investment in property.

It came to market in January 1980 with a market capitalisation of less than £1m. At flotation, Mr Meyer not only did not buy any shares, but borrowed 12 times his salary to buy more at the placing price. Now aged 39, he still owns more than 3 per cent of the ordinary shares, worth £3.67m.

He feels strongly that any chief executive should have more than 75 per cent of net worth invested in his own company.

But Mr Meyer has drawn lessons from both. The recent record at Concorde/Rotaflex under GTE, where there has been an emphasis on volume, may exemplify the approach of multinational giants which also make light fittings.

"We're driven by volume," says Mr Meyer. "We're driven by profit. We'd rather drop the volume and make more profit per unit."

Similarly, he says: "At the end of the day, we could have got Eurolumine if we'd been willing to pay [an earnings multiple] in the high 20s. In our view, we can get an exposure in France at a lower risk than that."

Mr Meyer has drawn lessons from both. The recent record at Concorde/Rotaflex under GTE, where there has been an emphasis on volume, may exemplify the approach of multinational giants which also make light fittings.

"We're driven by volume," says Mr Meyer. "We're driven by profit. We'd rather drop the volume and make more profit per unit."

Indeed, at this spring's Hanover Light Show, the only selling fitting on Emess' booth which appeared to stick out from the cool Marin look was one that had originally been designed for Mr Meyer's kitchen, although not, it must be said, by the chairman himself.

Emess is sponsoring The New Designers, an exhibition of 1989 graduate designers working in interior, industrial and product design. July 16-19, Business Design Centre, 52 Upper Street, London N1.

COMPANY NEWS DIGEST

Stirling drops to £2.74m

STIRLING Group, garment maker, reported taxable profits down 22 per cent from £2m to £2.74m in the year ended March 31 1989, on a lower turnover of £40.21m (£41.65m).

However, with the order book full and the first quarter in line with budget, the company looks forward to improved results for the year.

Earnings per 20p share fell to 4.7p (7.05p), but the dividend is maintained at 1.35p with a 0.85p final.

Reduced deficit reported by OEM

A reduced deficit for 1988 was yesterday reported by Office and Electronic Machines, the manufacture and distribution group.

On turnover down to £19.2m (£23m), the pre-tax loss came out at £1.84m against a £4.02m loss the previous year.

After an increased tax payment of £1.11m (£3.88m) as a result of tax losses in a Dutch subsidiary and an extraordinary

gain of £223,000 (nil) from the sale of a freehold factory, earnings per share came out at 17.4p (17.04p).

A final dividend of 4.4p (3.52p) is proposed, bringing the total for the year to 6.6p (5.25p).

UMECO joins the USM via placing

UMECO, a specialist engineering business, is joining the USM via a placing which values it at £5.85m.

The company, which was founded in 1971 under the title University Motors and Engineering Company acted as a motor distributor until 1984.

The loss-making car distribution businesses were sold and the profits realised from their sites helped the company move into its current businesses.

Sheppards is placing 2.51m shares at 25p. 2.11m shares are being sold by existing shareholders and 500,000 new shares are being issued by the company to raise £175,000 net of expenses. In the year to March 31, UMECO made pre-tax profits of £641,000 (£522,000) on turnover of £29.32m (£26.83m). Dealing are expected to start on July 10.

Doubled profits at Embassy Property

Embassy Property, which came to the USM via a placing last November, reported pre-tax profits more than doubled to £2.28m for the year to March 31.

However, Mr Roger Holbeche, chairman, warned that housing sales would be difficult while current high levels of interest rates prevail.

Turnover was £17.27m

second half remained "difficult" and prospects for an upturn in consumer demand and a fall in interest rates were "not encouraging".

Turnover amounted to £10.54m (£8.34m). Earnings per 10p share dipped to 2p (4.1p), but the interim dividend is maintained at 1.35p.

Textured Jersey margins squeezed

Profit margins under pressure at Textured Jersey have meant a fall in net sales from £11.3m to £9.9m in the six months to April 30. The advance from £517,000 achieved last time came on turnover ahead from £18.1m to £22.2m.

The interim dividend is raised to 1.5p (1p). The group is quoted on the Third Market.

Geevor moves back into the black

Geevor, the tin mining group which has been expanding its coal interests, moved back into the black thanks to profitable trading in the second half.

The company is taking further steps to rationalise its activity and to improve cost effectiveness. An extraordinary debit of £167,000 arose from the closure of the Leicester knitting operations.

Turnover advanced from £1.37m to £1.37m. There is again no dividend.

This advertisement is issued in compliance with the requirements of the Council of The International Stock Exchange of the United Kingdom and the Republic of Ireland Limited ("The Stock Exchange"). It does not constitute an invitation to the public to subscribe for or purchase any stock or shares.

DMWSL 033 PLC

(Incorporated in England and Wales under the Companies Act, 1985—Registered No. 232/093)

Introduction to listing of 7.5p (net) first redeemable preference shares of 50p each

Application has been made to the Council of The Stock Exchange for the 7.5p (net) first redeemable preference shares of 50p each ("Replacement Preference Shares") to be admitted to the Official List and dealings are expected to commence today.

Details of the Replacement Preference Shares are available in the statistical services of Eutel Financial Limited. Copies are available for collection from the Company Announcements Office, The International Stock Exchange of the United Kingdom and the Republic of Ireland Limited, 46 Finsbury Square, London EC2A 1DD up to and including 6th July, 1989 and may be obtained during normal business hours on any weekday (Saturdays and public holidays excepted) up to and including 17th July, 1989 from:

Brokers Trust
International Limited
1 Appold Street
Broadgate
London EC2A 2HE

Samuel Montagu & Co. Limited
10 Lower Thames Street
London EC3R 6AB

Hoare Govett Corporate Finance Limited
4 Broadgate
London EC2M 7LE

4th July, 1989

Milk Marketing Board

£75,000,000 Floating Rate Notes 1993

In accordance with the provisions of the Notes, notice is hereby given that the rate of interest for the three month period 20th June, 1989 to 20th September, 1989 will stand at 14% per cent plus 1.4% per cent per annum. The 14% will therefore be payable on 20th September, 1989 at £1,784.16 per coupon from Notes of £50,000 nominal and £178.42 per coupon from Notes of £25,000 nominal.

TECHNOLOGY

The sinking of a Soviet Mike class nuclear-powered submarine in April and the fire on another Soviet nuclear submarine last week pose unusual dilemmas which the world's navies would probably prefer to ignore.

Should newly sunk submarines lie, like sleeping dogs, on the ocean floor when the technology to raise them is available? And, whether or not reactors or missiles are leaking radiation, is the sea floor the safest place for them to be, or should every effort be made to retrieve them?

These questions are complicated by a common abhorrence of anything radioactive, and by the fact that the radiological impact on marine ecology is hard to measure.

The US navy said that no more than trace amounts of radioactivity had been detected in the vicinity of two sunken US nuclear submarines in the Atlantic.

But a technical study, commissioned by the environmental pressure group Greenpeace from Large and Associates, the London consulting engineers used as safety experts at the Hinckley Point inquiry, disputes claims like these. The Large report on the sinking of the Mike vessel concludes that "significant" amounts of highly radioactive and toxic materials would eventually disperse to the marine environment unless the submarine was recovered intact.

The ocean floor was something of a nuclear junkyard until 1983, by which time most United Nations countries had agreed to a moratorium on the dumping of nuclear waste at sea. But there is no similar convention on naval accidents, and the sea bed is reportedly littered with nuclear debris as a consequence of one severe accident a week since 1985.

Leaving a stricken nuclear sub on the seabed is certainly much easier than bringing it to the surface. But when the Mike sank, the Soviet Union made an unusual announcement. It would try to recover the boat. Viktor Orluk, editor of Soviet Weekly, said last week that the expedition to salvage the submarine from its present grave, 5,000 ft deep in the Arctic Ocean off Norway, was now "being organised."

This made pleasant hearing for those anxious that crushing pressure - 445 lbs per sq in for each 1,000 ft of depth - on the submarine's twin reactors, coupled with corrosion, would guarantee a leak of radioactivity into the sea.

But raising a nuclear subma-

Serious accidents to two Soviet nuclear submarines have prompted questions about the wisdom of leaving reactor-carrying wrecks on the sea bed. Rachel Johnson reports

Deep dilemma over raising sleeping dogs

rine from the sea bed has never been done successfully. The last time it was attempted, in 1975 when the CIA and Howard Hughes tried to salvage a Soviet Golf class submarine in the Pacific, the vessel broke apart.

Captain Richard Sharpe, editor of *Jane's Fighting Ships*, says that the Russians will try to raise the submarine because it is worth raising. There is no suggestion that the expedition will be to recover the bodies of 45 crewmen, or to reduce the long-term risk of radioactive leakage. But no nuclear sub has ever been salvaged at this depth, he points out.

There are three good reasons to raise the sub, he says. The Mike vessel is the only one of its kind and has a unique hull design: there are nuclear weapons on board; and the causes of the uncontrolled fire that led to its sinking urgently need to be established.

But how to raise a 9,000-tonne submarine from the sea bed? It would need the very latest advances in recovery techniques, according to Barrie Walden, manager of submarine operations at the privately funded Woods Hole Oceanographic Institute in Massachusetts.

In the case of the Mike, either an unmanned robot or a manned submarine would be needed to find it. While it was sinking, it would have drifted some miles, says Walden.

To complicate matters, the reactor itself might have become dislodged from the hull and embedded itself apart from the rest of the wreck in an enormous crater.

So, before recovery can start, the Russians will have to pinpoint the location of the vessel. To do that, they will need something resembling the

unmanned robot which discovered the wrecks of the Titanic in 1986 and the Bismarck last month.

Jason is a remotely operated vehicle capable of transmitting sound and images, live and in colour, in depths of up to 20,000 ft, could help to find the Mike and then attach cables to the wreck.

According to Captain Sharpe, if the submarine sank sealed, then the crushing depth would have fractured the hull, making recovery all the more difficult.

But if the Mike's captain deliberately scuttled it, as most observers believe he did, the submarine should be intact. With the hatch open, the pressure inside it would be equal to that outside, even in crushing depths.

Then an unmanured, remotely controlled mini-submarine could seal the hatch, pump out the water from the hull and buoyancy tanks, and fill them with air to a pressure equal to the pressure of water outside.

This would achieve a natural buoyancy. Combine this with the Archimedes displacement principle, and the sub is considerably more moveable than before, says Captain Sharpe.

A minimum of two surface vessels, with cables running between them, could then winch the Mike to the surface.

Whether the Soviet navy will undertake this complex operation remains to be seen. It may decide to leave the wreck alone - along with another 50 nuclear warheads and seven reactors on the bottom of the oceans, including a warhead accidentally dropped into the sea off south-east Spain by the US air force.



A smoking Soviet Echo-2 class nuclear submarine being towed back to its home base in Severomorsk last week.

Preliminary scientific evidence seems to suggest that the bottom of the ocean is not such a bad place for materials to be. Water is the best container of radiation there is," says Sharpe. If the reactors have been shut down before sinking and the fuel rods are spent, "there is no conceivable comparison with Chernobyl."

Testing of the seas off Norway and the Mike submarine's sinking found no radiation leaks.

Nuclear reactors are built to survive even if the hull is crushed. The nuclear fuel is encased in a heavy steel pressure vessel in a hull compartment, and both are "hugely strong," he says.

After a few weeks, the reactor will emit as much radiation as a granite outcrop in Aberdeen and certainly less than the ambient levels in the sea.

But the Large and Associates report reckons that each of the reactors of the Mike-class hunter-killer submarine contains about 1.5 tonnes of highly enriched uranium, which would eventually release up to 20m curies of radioactivity into

the ocean. In comparison, this is about a third of the radioactivity released by the Chernobyl accident.

The impact of this radiation release on the environment, marine life, or man, is almost impossible to quantify, says the Large report. But the radioactivity would leak out even if the submarine had been scuttled, because the reactor chamber would remain airtight and would therefore be crushed.

Nuclear fission products are very migratory, says John Large, head of the consultancy.

When it is reported that there is little radioactivity in the waters around subs, that is absolute nonsense. It depends how you look and what you look for." The Norwegian and Soviet governments had not made enough information available for a sensible result to be reached, the study says.

Without an accurate measure of radioactivity, or an easy method of raising subs, it seems that navies will still face the same dilemma - while the submarines still lie at the bottom of the sea.

'Best buy' verdict on PCs

THE PERFORMANCE of nearly 200 personal computer models has been scrutinised by What to Buy for Business, the London office equipment consumer report.

As well as looking at product excellence and value for money, the publication asked more than 700 subscribers for their views on service and reliability.

There were four "best buy" labels awarded in the lap-top category and three of them went to Toshiba, the Japanese manufacturer that already dominates this sector. The fourth award was to Sharp, also of Japan.

Defi, a US company which has only operated in the UK in the last three years, received four of six "best buys" in the desk-top category. The others two went to Telecom and America.

The publication's editor, Julian Lloyd, says that apart from technical excellence, the assessors were looking for customer peace of mind.

"Buyers want increasingly high performance systems, but equally important are the level of reliability and the quality of after sales service.

All too often, technically exciting machines are let down by poor quality manufacture or by lousy dealer support," says Lloyd.

The survey also revealed that high prices do not necessarily mean high quality. Upmarket brands, such as IBM and Olivetti, received mediocre ratings for service and fare no better than Amstrad on reliability.

Airborne check on corrosion

BATTELLE, the US-based international research group, has developed an electronic system to detect corrosion in the structural recesses of aircraft.

The idea is to provide continuous information about corrosion in ageing airliners and helicopters. The system could greatly reduce the need for extensive manual checks for corrosion in areas of difficult access. Moisture, salt and dirt can accumulate in such places, causing components or systems to fail if left undetected.

Battelle's system spots the onset and severity of corrosion by automatically monitoring increases in the

electrical resistance of small metallic sensors mounted on airframe components. The thickness of the sensors decreases as corrosion eats away the metal.

Signals from the sensors are dealt with in a small computer that can work out the relative rates of corrosion at various places on the aircraft.

Market data by satellite

A NEW satellite service which distributes financial market information has been introduced into the UK by the Euro American Group of London. The system, called Satquote, covers most UK, US and Canadian equities and futures, and is aimed at private investors, financial advisers and stockbrokers.

Satquote operates over Eutelsat 4, in geostationary orbit 22,000 miles above the mid-Atlantic. The service transmits data as it is generated by Standard and Poor, the New York financial information bureau, and is picked up via a dish aerial and receiver.

Apricot, the computer maker, will supply the necessary hardware and Granville will conduct a site survey and install a complete system anywhere in the UK.

Another UK company, EAG, will provide the user with bespoke software systems to carry out analyses of the Satquote data. Examples are portfolio analysis, options pricing and risk analysis.

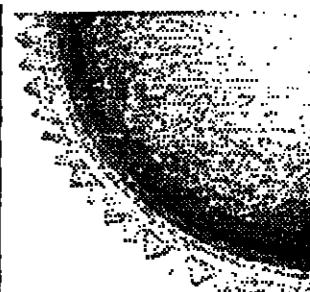
The Satquote service costs £196 a month, which Euro American says is about a tenth of the cost of services based on land lines. The hardware can be leased for £151 a month, or purchased for £151 for over £4,500. The EAG software is extra.

Control system for car parks

TRAFITEL, of France, has developed a computer-based control centre that can look after several car parks at once on a 24-hour basis.

Car park control and management involves keeping track of traffic, attending ticket machines, barriers, lighting and ventilation. Alarm telephones, security and surveillance are all necessary.

The French system, called Cristal, provides management personnel with video



WORTH WATCHING

Edited by Geoffrey Charlish

surveillance, audio intercommunications, automatic monitoring of car park equipment and remote control of barriers, lighting, ticket machines and public display signs, such as those that indicate how many spaces are left in each park.

Cristal's traffic monitoring facility provides an up-to-date automatic count of the number of vehicles in each park.

Soil nailing solves Mway problem

A MACHINE that rapidly runs rails into soil should enable motorways to be widened more quickly and at less cost.

The University of Wales has developed the fast soil-nailing machine for Ryan International, the Cardiff engineering company.

When a motorway is in a cutting, the soil bank has to be cut back to allow widening. The shallower the bank angle, the more stable it is, but the more soil has to be removed.

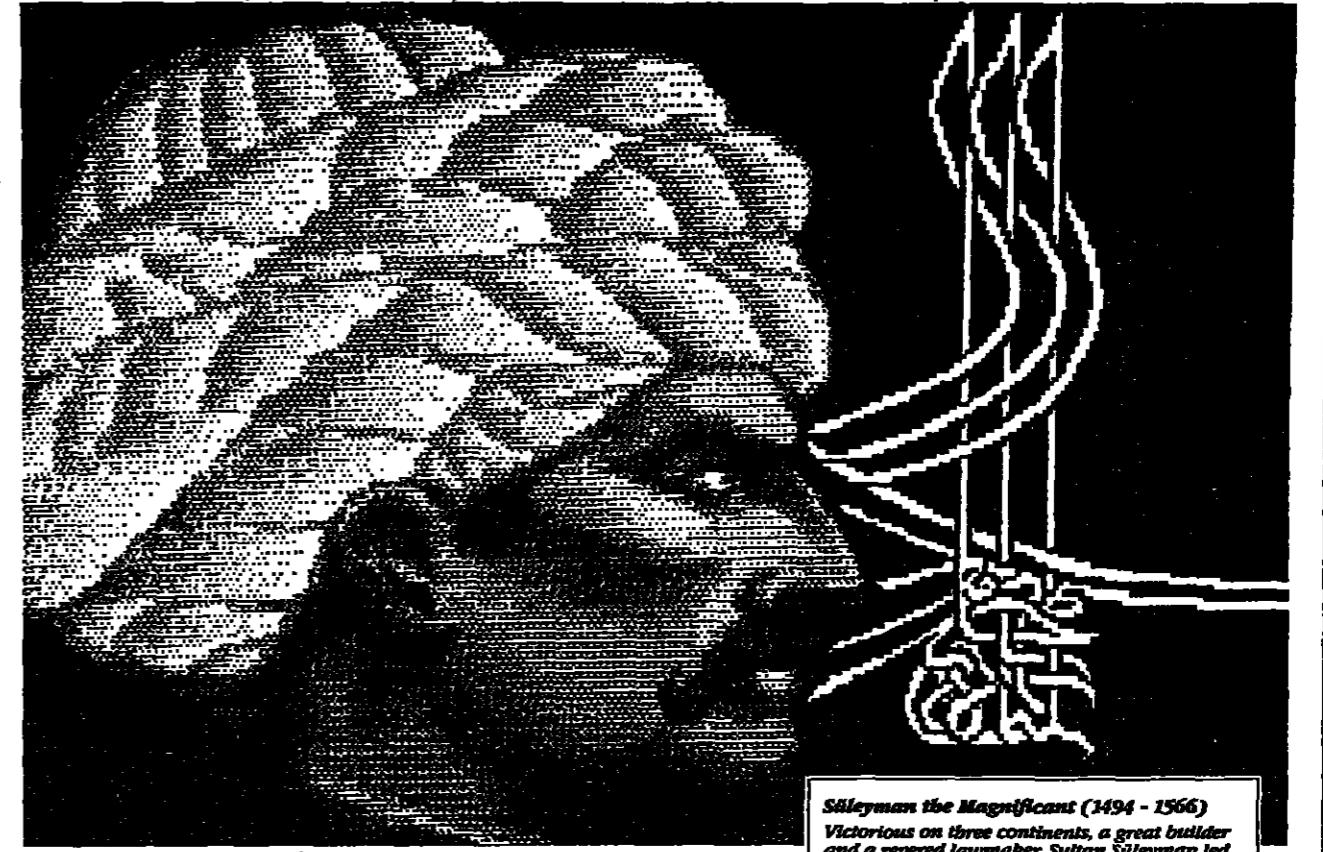
The civil engineering answer is to "nail" the soil, which allows a stable, steeper bank angle, reducing soil removal and saving time.

Using compressed air, the Cardiff machine fires one six-metre steel nail a minute using a device from Ferranti called an air launcher, mounted on a vehicle from Compact Loaders.

Conventional methods, which involve drilling and grouting, allow only one nail to be driven in every 20 minutes.

CONTACTS: What to Buy for Business, London, 01-580 0154; 424 7094 or in London on 083 0154. Trafitel, France, 9399 3180. Euro American, London, 233 1100. University of Wales: UK, 0222 374 003.

Knowledge leads to success



Suleyman the Magnificent (1494-1566) Victorious on three continents, a great builder and a revered lawman, Sultan Suleyman led the Ottoman Empire to its golden age during his 45-year reign, ruling with strength and brilliance.

Ask any historian...

Suleyman the Magnificent derived his success from his immense knowledge of affairs of state, the arts and culture. Turk Ekonomi Bankasi works with a select group of clients and prime correspondent banks with the same philosophy:

Knowledge leads to success.

TEB's highly professional team adheres to traditional banking values, following financial movements and economic changes in Turkey and around the world.

TEB is a leading provider of a full spectrum of wholesale banking services with a special emphasis on foreign trade and corporate advice.

TEB's Advisory Services Department provides special consultancy services on capital market strategies, privatization, investment projects, commercial law, taxation, accounting systems, tourism and computer software.

For your business in Turkey, contact TEB. Profit from our knowledge and experience.



TÜRK EKONOMİ BANKASI A.Ş.
Profit from our knowledge

GENERAL MANAGEMENT
ISTİKLAL CAD. 284 ÇAKMAK 80090 BEYOĞLU-İSTANBUL, TURKEY PHONE: (1) 51 21 21 TELEX: 25556 TEBU TR TEL/TEXT: (1) 93 024 EKOBAN TR FAX: (1) 54 05 66

TSB TRUSTCARD

Interest Rate

Trustcard announces that its interest rate is to be increased to 2.2% per month.

Interest at the new rate will appear first on statements dated on or after 1st August 1989. The cash advance service charge remains unaltered at 1.5% of the amount taken.

The Annual Percentage Rate of Charge (APR) is increased to 29.8% for both purchases and cash advances.

Condition 7 of the Trustcard Conditions of Use is amended accordingly. For further information, call at any TSB branch or write to Trustcard, 1-9 Gloucester Place, Brighton BN1 4BE.

TSB TRUSTCARD LIMITED

TSB Trustcard Ltd, Registered in England & Wales No. 136534, Registered Office: 1-9 Gloucester Place, Brighton BN1 4BE.

OFFSHORE OIL INDUSTRY

The Financial Times proposes to publish this survey on:

6th September 1989

For a full editorial synopsis and advertisement details, please contact:

Ian Ely-Corbett

on 01-873 3389

or write to him at:

Number One
Southwark Bridge
London
SE1 9HL

FINANCIAL TIMES
EUROPE'S BUSINESS NEWSPAPER

LONDON STOCK EXCHANGE

Little strength behind equity rally

A CAUTIOUS rally in the UK stock market was restrained yesterday by discouraging reports on economic progress on both sides of the Atlantic. Share prices made a brave start in early dealings but turnover was lamentably thin and it was left to a batch of bid and other special situations to provide the features of the day.

London drew some cheer towards the end of its morning trading session by Wall Street's firm opening in the face of a report from purchasing managers suggesting a further slowdown in the American economy last month. It was the disclosure of an unexpected downturn in the US

London share prices moved

Associate Dealing Dates		
First Dealings:	Jun 19	Jul 3
Opt-in Deadlines:	Jun 29	Jul 13
Last Dealings:	Jun 30	Jul 14
Access Days:	Jul 10	Jul 24
Where these dealings may take place from 10.00 am on business days earlier:		

equity in May which prompted last week's setback in both the Wall Street and UK stock markets. However, international funds were clearly unwilling to take new decisions ahead of the closure today of US markets for Independence Day.

London share prices moved

ahead at the opening of the equity sector, encouraged by a firmer performance by sterling and an easing in domestic money market rates. There was little institutional activity, however, as shares drifted upwards to show a gain of just over 11 points on the FT-SE index. Little heed was paid to data on UK retail sales (revised) and credit business for last month.

Prices came on the top fairly quickly and confidence was subdued throughout the session. The market closed on an unenthusiastic note, with traders resigned to a difficult week which takes in both the US holiday and the threat of

another one day transport strike in the UK.

At the close, the FT-SE index was 14.6 up at 2,165.6, while Sean volume of 410.8m shares compared with only 350.0m on Friday. Gains were scattered, across the range but the market traders had little to do.

The features of the day stood out all to clearly against the generally drab backdrop. Ward White responded vigorously to a 230m bid from Boots, whose shares fell sharply despite Ward White's rejection; the market sensed another bid fight in the retailing sector and believes Boots will have to pay dear.

A further fall in Plessey

shares followed confirmation that talks are planned with GEC, aimed at settling the protracted bid battle between the two electronics/defence companies. The market has been growing increasingly nervous as it has waited for the Ministry of Defence to give its ruling on the proposed GEC/SEAC bid for Plessey.

Consolidated Gold Fields continued to edge closer to the £15 price which the market is convinced Hanson will agree to pay for the equity of the mining and industrial giant; turnover increased significantly, although there were no new developments in the saga yesterday.

Plessey tumbles again

Plessey shares were given another rough ride in the market yesterday after weekend press reports confirmed that GEC/Siemens had been holding talks with Plessey over the possibility of buying Plessey's 50 per cent stake in the GPT telecommunications joint venture, and that a full bid for Plessey might not therefore materialise.

Sold hard late on Friday afternoon when suggestions of the talks began to filter into the market, Plessey shares dropped even more sharply yesterday, touching 225p at one point before steady to close at a net 17 off at 230p. Turnover was 115m shares, much higher than usual.

Sector specialists were taking the view that discussions between GEC/Siemens and the Ministry of Defence over conditions for the duo to re-bid for Plessey had reached an advanced stage, as had the talks with Plessey over the latter's GPT stake. "We are expecting hard news some time this week," said one. He added that if Plessey was to sell the GPT stake, for perhaps some 2700 to 2750m, then the GEC/Siemens 15 per cent stake in Plessey would possibly also be part of the deal.

"But it makes you wonder if GEC is talking the Plessey share price down ahead of launching a bid much lower than the market expects," said one analyst. The original bid was 225p a share, with a subsequent market raid carried out at 245p a share. GEC slipped 1% to 233.4p on turnover of 6.6m shares, and a price of 230p.

Ward White bid

The long-awaited bid in the Stores sector arrived in the shape of an 880m offer for Ward White from Boots, and judging by the closing price the market expects a long fight. Ward White, after an early raid by broker Kleinwort Benson, on behalf of Boots, finished the day 117 higher at 42p, well above the 40p offer for the ordinary shares. Boots closed 21 lower at 230p on turnover of 18m.

Boots already has 10.65 per cent of its target, the bulk of which was acquired last week at 315p. Dealers believe Boots will have to raise its offer, perhaps to as much as 45p, to pick up more stock. One US securities house, Morgan Stanley, has already placed a break-up value of 500p a share on Ward White.

The Boots price fell sharply

because of concern about the effect on earnings, said analysts. "Boots says there will be no dilution, but this is based on figures only up to January 1987; on a full year basis there would be dilution, even if the offer stays at 40p," said one. "What is worrying is that Boots has made a bid but has no obvious way to drive earnings ahead," said another.

Carlton placing

A 250m placing and analysts' recommendations combined to depress Carlton Communications, down 6 at 81p. The stock also went ex a 3.06p dividend. Two new instruments, Carlton Communications New and a convertible preference share, began trading. Both are consequences of Carlton's 100m takeover of UEL; 100 UEL shares are exchangeable for 56 Carlton New plus 223 of the convertibles.

BZW and Shearson Lehman jointly placed 5.7m new shares at 23 - the result of the conversion of Carlton's own holding in UEL - and the convertible at 21. The placing was oversubscribed. The new shares cannot be bought in the US and the absence of potential buyers there meant the new stock closed at a 5p discount to the old. The distinction between the two ends after six months. The convertible closed at 18p after touching 16.5p.

Ms Brownie Maddox, at Kleinwort Benson, said she was pleased with the placing of Carlton into the company to Wimpey NV, a company controlled by the Nash family trust; Wimpey already holds a 5.25 per cent stake in Goods Durrant and said that in order to comply with Bank of England regulations it would place controls of shares in excess of 15 per cent of Goods Durrant - some 2.55m shares - with Gilbert Elliott, the stockbroker. Stories in the market suggested that given Bank of England permission, Wimpey would eventually make a full bid for Goods Durrant.

Life assurances made progress and were featured by Prudential where dealers said strong Continental buying had lifted the shares 5% to 176.5p on turnover of 8.4m.

Sum Alliance were quoted at 279p after being adjusted for the four-for-one scrip issue. London United suffered badly, dipping to 57p at one point after a press report suggesting a subsidiary could face insolvency closing in up to 800m; a subsequent strenuous rebuttal of the report by London United caused a late rally to 60p, a net decline of 2.

Scottish & Newcastle was traded narrowly ahead of the full-year results. The market range for today's figures is 50p to 52p.

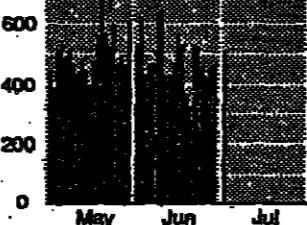
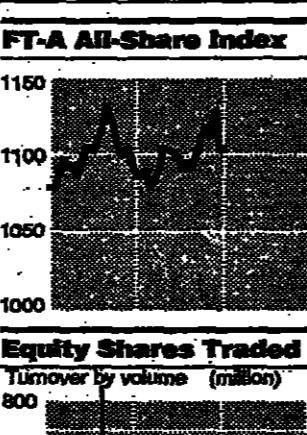
Goods Durrant, the financial services group, gained 6 to 134p after news that FAI Insurance, the Australian group, had sold its 14.8 per cent stake in Wimpey.

Ward White bid

The long-awaited bid in the Stores sector arrived in the shape of an 880m offer for Ward White from Boots, and judging by the closing price the market expects a long fight. Ward White, after an early raid by broker Kleinwort Benson, on behalf of Boots, finished the day 117 higher at 42p, well above the 40p offer for the ordinary shares. Boots closed 21 lower at 230p on turnover of 18m.

Boots already has 10.65 per cent of its target, the bulk of which was acquired last week at 315p. Dealers believe Boots will have to raise its offer, perhaps to as much as 45p, to pick up more stock. One US securities house, Morgan Stanley, has already placed a break-up value of 500p a share on Ward White.

The Boots price fell sharply



155m to 2140m, but what concerned dealers most yesterday were stories that the company will sell its Thistle Hotels subsidiary, purchase a controlling stake in Holland's Center Parcs, and acquire the brewing operations of a big UK brewer, possibly Grand Metropolitan. SAN ended only 3 higher at 115p than 230p at 112p yesterday.

Unilever's 800m acquisition of Calvin Klein Cosmetics was well received by the market. Mr Carl Short, analyst with broker Kitcat and Aitken, edged up his forecast for current year profits by 33m to £165m. The stock closed 6 higher at 53p.

Trasthouse Forte were heavily traded, the stock adding 7 at 32p on turnover of 8.4m shares. Dealers sighted one large trade of 2.2m shares. Newarthill shares rocketed 360 to 2380p after the board revealed plans to buy back up to 25 per cent of its shares at 24p a share via a tender offer. Atwoods were down around 25 at one point as the market got wind of an adverse TV programme, but later picked up to close only 4 down on balance at 45p.

Coats moved up 6 to 42p amid market hopes that Anglo United will soon increase its bid terms from the current 42p a share.

The oil sector made good progress, boosted by a strong performance from crude oil prices responding to voluntary production cuts by Abu Dhabi and the possibility of strikes by maintenance workers on North Sea rigs.

Gestetner saw-sawed in early trading after the stock went ex dividend and the company announced the 271m purchase of Australian-owned Hanimax. The initial fall was soon compensated for when dealers considered the deal in detail and a mixture of institutional and speculative buyers moved in.

Mr Peter Joseph, analyst at Smith New Court, said that the deal was "good value for money." But he warned that there was "concern over the earnings dilution implications of nil paid convertible prefer-

shares held by Australian investment group AFP, which effectively runs Gestetner." AFP will only hold a majority of Gestetner shares if its convertible holding is paid up and converted. Gestetner Ord closed 22 better at 22p.

United Biscuits eased slightly to 370p on turnover of 3.8m shares after US group PepsiCo revealed it was buying Walkers, Crisps and Smiths Crisps from French group BSN for \$1.85bn. UB was a strong market last week on speculation that PepsiCo had built up a stake and was preparing a bid. Although the acquisition from BSN removed the likelihood of a bid from PepsiCo, said analysts, it was still possible that the US group might make an offer for UB's Wimpy and Pizzaland restaurant chains. UB shares have also been buoyed recently by talk of Swiss interest.

Gestetner saw-sawed in early trading after the stock went ex dividend and the company announced the 271m purchase of Australian-owned Hanimax. The initial fall was soon compensated for when dealers considered the deal in detail and a mixture of institutional and speculative buyers moved in.

Mr Peter Joseph, analyst at Smith New Court, said that the deal was "good value for money." But he warned that there was "concern over the earnings dilution implications of nil paid convertible prefer-

shares held by Australian investment group AFP, which effectively runs Gestetner." AFP will only hold a majority of Gestetner shares if its convertible holding is paid up and converted. Gestetner Ord closed 22 better at 22p.

United Biscuits eased slightly to 370p on turnover of 3.8m shares after US group PepsiCo revealed it was buying Walkers, Crisps and Smiths Crisps from French group BSN for \$1.85bn. UB was a strong market last week on speculation that PepsiCo had built up a stake and was preparing a bid. Although the acquisition from BSN removed the likelihood of a bid from PepsiCo, said analysts, it was still possible that the US group might make an offer for UB's Wimpy and Pizzaland restaurant chains. UB shares have also been buoyed recently by talk of Swiss interest.

Gestetner saw-sawed in early trading after the stock went ex dividend and the company announced the 271m purchase of Australian-owned Hanimax. The initial fall was soon compensated for when dealers considered the deal in detail and a mixture of institutional and speculative buyers moved in.

Mr Peter Joseph, analyst at Smith New Court, said that the deal was "good value for money." But he warned that there was "concern over the earnings dilution implications of nil paid convertible prefer-

FINANCIAL TIMES STOCK INDICES

	Jul 3	Jun 30	Jun 29	Jun 28	Jun 27	Jun 26	Year Ago	1988 High	1988 Low	Since Compilation
Government Secs	85.47	85.01	85.03	85.65	85.55	87.54	82.29	85.75	127.4	49.18
Fixed Interest	98.33	96.27	95.94	96.02	96.01	97.34	95.58	95.21	105.4	50.53
Ordinary	1791.6	1784.5	1808.5	1824.4	1820.7	1876.3	1837.5	1847.8	1928.2	48.4
Gold Mines	185.2	186.4	186.2	185.2	182.8	213.1	186.5	184.7	234.7	43.8

● S.E. ACTIVITY Indices

Jun 30 Jun 29

Gilt Edged Bargains 93.4 94.4

Equity Bargains 204.2 184.3

Equity Value 2725.8 3003.4

5-day average 103.9 101.8

Gilt Edged Bargains 186.7 182.7

Equity Value 2703.1 2734.3

● London Report and latest Share Index: Tel. 0898 123001

Basic 100 129.950, SE Activity 197.4, 198.1 112.5 Excluding intra-market business. *Official recalculation following data error.

TRADING VOLUME IN MAJOR STOCKS

The following is based on trading volume for most Alpha securities dealt through the SEAC system yesterday until 5 pm.										
Stock	Value	Days	Days	Stock	Value	Days	Days	Stock	Value	Days
ABG Group	1.09	179	2	Admiral	0.09	179	2	Aerospace	0.09	179
Admiral	0.09	179	2	Alcan	0.09	179	2	Alcan	0.09	179
Alcan	0.09	179	2	Alcan	0.09	179	2	Alcan	0.09	179
Alcan	0.09	179	2	Alcan	0.09	179	2	Alcan	0.09	179
Alcan	0.09	179	2	Alcan	0.09	179	2	Alcan	0.09	179
Alcan										

UNIT TRUST INFORMATION SERVICE

- Current Unit Trust Prices are available on FT Cityline. To obtain your free Unit Trust Code Booklet ring the FT Cityline help desk on 01-925-2128

UNIT TRUST INFORMATION SERVICE

• Current Unit Trust Prices are available on FT Cityline. To obtain your free
FT Cityline Booklet, ring the FT Cityline help desk on 01-925-2126

Guernsey (ISB) Recognised														

FT UNIT TRUST INFORMATION SERVICE

ISLE OF MAN ()**

CAL Investments (Ireland) Ltd	166.5	70.1	A YRA Worldwide	10.0	9.8
*Denotes Manager.					
Equity & Law International Fund (Ireland)	145.75	112.92	Emerging Asia	151.945	151.95
EU Equity Fund	115.00	100.00	For other offices ring 0411 26725-2		
North Amer Equity	51.204	11.934			
UK Equity	146.95	15.22			
Global Equity	111.16	10.25			
EU Gilt & Fixed Inv	100.93	10.54			
Bonds & Derivatives	100.005	10.002			
Sterling Denom.	51.000	10.000			
Yen Denom.	106.30	11.00			
Managed Currency	158.77	125.00	10.781		
Chartmore Fund Managers (Gibraltar)	111.00	10.00	Asia Pacific Fund	11.00	11.00
Int'l. Inv. Fund 30	12.9	2.75	Historic Yield - based on date 14.6.99		
Hollings Scandinavian Fund Ltd	180.88	194.091	2.0		
IMX Global Funds Limited					
Int'l. Inv. Fund	111.00	14.26			
Int'l. Inv. Fund	111.00	12.00			
Int'l. Inv. Fund	111.00	12.43			
International Equity	111.73	14.46			
International Bond	114.27	14.79			
Managed Currency	119.00				
Mercury Fund Managers Ltd					
Mer. Inv. Fund	112.1	11.51	-0.3	0.0	
Mer. Inv. Fund	149.59	53.27	+0.01	0.4	
RBC Magna Investment Managers Ltd					
Global Asset Invest.	107.5				
Ridgeview Overseas					
Master Fund A	102.12	107.79	-0.66	7.22	
Tst Fund	93.38	10.99			
Gilt Growth	100.52	101.82	+0.02		
Sarasin Isle of Man Ltd					
Pfund Inv. Fund 22					
EU Fund Inv. Fund					
Stronghold Investment Managers					
Stronghold Fund Inv.	114.55	11.25	-0.24		
100.28	15.51				
Next reporting date: July 18, July 17					
Target Institutional Fund (Ireland) Ltd					
HIC Dividends Fund	119.84	11.54			
Prest. Street Inv. Fund	110.49	11.08			
Yield & Lease Inv. Fund	110.32	10.61			
Blackstone Funds Wt/Wt	119.62	10.03			
Global Mkt Wt/Wt	112.33	12.88			
Tactical Inv. Inv. Fund	120.85	9.27			
Typical International Fund (Ireland) Ltd					
EU Inv. Inv. Fund	110.4	10.74	-0.4	11.96	
Accum. Share	110.5	10.81	-0.31		
LUXEMBOURG (L)					
CMB Asset Management (Luxembourg) SA					
Sovereign Portfolio	104.7	11.27	-0.2		
Growth Portfolio	94.7	10.03	-1.2		
Enterprise Portfolio	84.1	9.6	-0.5		
Capel-Carey Investors International Fund					
Sector Themes Fund	117.48	9.78	-1.02		
Sterling Thematics Fund	111.04	11.02	-0.09		
US\$ Thematics Fund	59.47	9.78	+0.02		
US\$ Thematics Growth	59.42	10.46	-0.12		
ES Securities Ltd					
Yankee Equity Wt. Fund	510.73				
Fidelity International Services (Ireland) SA					
Euro Inv. Portfolio	59.56	10.04	-0.04		
New Europe Fund	59.74		-0.10		
Fidelity International Services (Ireland) SA					
Euro Inv. Portfolio	510.54	11.07	-0.05	9.95	
Euro Part-Dedicated	511.08	11.65	-0.02	0.25	
Discovery Fund	511.62	11.66	-0.01	0.25	
For. Inv. Fund	511.92	11.74	-0.02	0.25	
Frontier Fund	512.24	11.66	-0.07	0.25	
Global Selections Fund	511.81	12.02	-0.05		
Internal Asset Fund	511.16	12.01	-0.11	0.38	
Orbit Fund	511.96	12.06	-0.07	0.16	
Special Growth Fund	511.53	11.11	-0.27	0.16	
World Fund	510.95	11.39	-0.18	0.12	
Fleming Group					
Fleming Fund Managers (Ireland)					
Balanced Fund	1120.74	20.74	+0.101		
Krediet Fund SA	111.29	22.75			
Fleming Asian Fund	111.29	22.75			
Fleming Japan Fund	114.10	30.581			
Gold Global Selection					
International Fund	111.16				
EU Fund	111.17	11.40			
US Fund	111.00	11.45			
For. Fund	111.17	10.74			
Acc. Inv. Fund	110.94	11.44			
International Investments (Affiliate) SA					
Euro Inv. Fund	112.82	21.05			
Euro Inv. Fund	112.82	21.05			
Europe Portfolio					
EU Fund	111.95	11.02			
Euro Inv. Fund	111.95	11.02			
EWS Deutsche Ges. F. Wertpapierhandel					
Provisions	110.57	71.72			
Dividends	110.57	71.55			
Europa Investment Trust Co Ltd					
Krona Fund (Inv. Fund 1) Inv. Fund 1	110.44	44.055	-0.01	0.005	
Euro Trust Fund Inv. Fund 2	110.44	25.000		0.0540	
Dove Witter World Wide Inv. Tr. SA					
MAV July 3		52.39			
Delta Green					
Delta Inv. Inv. Fund 27		35.05			
Delta Inv. Inv. Fund 27		44.322		0.001	
Agency (Korean Government) Inv. Fund 27					
Deutsche Investment Trust					
Deutsche Inv. Inv. Fund 27		41.64			
M. Reuter Fund	110.77	71.77			
Delta Assets Portfolio					
Cayman Islands Inv. Fund		51.00			
Drexel Securities Lambert					
Flintlock Group Limited					
Whistler Capital Limited					
Winchester Futures Ltd-Off Inv. Fund					
Whistler Futures Ltd-Off Series Fund					
Whistler Frontier Limited					
Winchester Hedge Fund Series					
Winchester Recovery Limited					
Winchester Recovery Multi-Strat					
Worldwide Social Fund NV					
Worldwide Securities Limited					
Dreyfus International Fund, Inc.					
MAV June 27		143.35		47.60	
Elders (Chartered) Inv. Fund, Eng. SA					
Elders-Aust Inv. Fund	110.74	110.50		110.50	
Elders Inv. Inv. Fund	110.74	110.50		110.50	
Esprit-Saam Investment Manager (SICAV)					
Southern Europe Fund		510.16			
Eurosafe Management S.A.					
Euro Fund Inv. July 3		525.10			
E.S. Europe Obligations SA					
Euro-Bulgaria		578.47		1-1.11	
Europe Plus Investment (CSICAV)					
MAV June 30		113.35		+0.07	
Far East Growth Fund					
Far East Growth		510.22			
Fidelity Distributions Inv. Ltd					
Av. Vol 1 Inv. May 31		511.15			
Av. Vol 1 Inv. May 31		510.75			
American Assets Fund		512.51		125.51	
Australia Fund		515.51		116.00	
Dollar Strategic Inv. Fund		510.55		105.00	
Pacific Fund		510.10		30.36	
Fidelity-Comcast Fund Managers (Germany) L					
Hannover & Berlin Inv. Fund		511.50			
First Convertible Securities Fund					
MAV June 30		511.52			
Forbes Securities Management Ltd					
Gulf Risk Income		47.7		50.3	
Gold Inv.		54.25		44.46	
Gold Appreciation		53.95		4.47	
Forbes & Colonial Management Ltd					
FAC Atlantic Fund June 29		520.20			
FAC European Fund June 27		527.23			
FAC Nordic Fund June 24		511.05			
FAC Mkt May 20 Fund June 27		510.41			
FAC Orient Fund June 21		503.90			
Fazenda Fund					
RAY MTC/20.10 IDR w/e US\$112.255					
Frankfurt Trust Investment-GmbH					
FT-Intertech		1080.05		63.21	
Frankl. Ethics Inv. Fund		1082.54		50.26	
Free World Fund					
MAV May 31		527.34			
The French Prestige Fund					
MAV June 30		517.78			
Exhibition Fund		FF 110.00			
Frobisher Fund Limited					
MAV June 19		54.26		4.45	
GT Investment Manager Co SA					
GTC Asia Pacific Inv. Fund		510.22		-0.25	
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.02			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Asia Star Fund					
GTC Asia Pacific Inv. Fund		511.94		-1.17	
GTC Australia Fund		510.90		-0.19	
GT Investors Fund					
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GTC Asia Pacific Inv. Fund		510.22			
GT Management Pte					

OTHER OFFSHORE FUNDS

GENERAL INSURANCES

LONDON SHARE SERVICE

COMMONWEALTH & AFRICAN LOANS

	Stock	Price	+	Int.	Int.
12 7 1/2 pc 1988-92	1	824	+4	8.22	11.90
12 7 1/2 pc Non-Accrued		200			
De. 4 1/2 pc 27-32 Accrued		442		5.33	9.33
LOANS					
Building Societies					
10 1/2 Anglia 10/1987-17/1991	99 1/2	10.70		14.62	
10 1/2 Anglia 11/1986-8.5 9.59	99 1/2	11.10		14.19	
10 1/2 Anglia 20 8.89	99 1/2	11.62		14.19	
10 1/2 Anglia 20 8.99	99 1/2	12.46		14.18	
10 1/2 Anglia 18 9.59	99 1/2	12.50		14.17	
10 1/2 Anglia 21 10.69	99 1/2	11.94		14.20	
10 1/2 Anglia 6.11.59	99 1/2	12.43		14.20	
10 1/2 Anglia 10 11.59	99 1/2	12.91		14.20	
10 1/2 Anglia 4 12.59	99 1/2	12.68		14.27	
10 1/2 Anglia 21 1.59	99 1/2	12.92		14.27	
10 1/2 Anglia 26 1.59	99 1/2	13.01		14.27	
10 1/2 Anglia 2 2.59	99 1/2	13.35		14.45	
10 1/2 Anglia 19.5 3.59	99 1/2	14.35		14.45	

Public Board and Ind.

FOREIGN BONDS & RAILS						
1989	Low	Stock	Price	+ or -	Div.	Yield
			\$	E	Per	End.
43	43	Greek 7% Ass.	46	-	3.50	18.75
43	43	Do. 6% 28 Sts. Ass.	46	-	3.50	17.50
43	43	Do. 4% Mixed Ass.	46	-	3.50	16.00
43	43	Hong Kong, 26 Ass.	50	-	2.75	12.57
43	43	Hyundai, 15% 2011.	152	+1.1	15.00	11.07
43	43	Hyundai 14% 2010.	120	+1.1	14.50	11.73
43	43	Ireland 9% 2030.	92	+1.3	9.75	11.30
AMERICANS						
1989	Low	Stock	Price	+ or -	Div.	Yield
			\$	E	Per	End.
12	26	Abbott Laboratories.	37	-	\$1.20	2.0
12	36	Allegiance & W. L.	70	-	4.00	5.71
12	32	Amex St. 1	151	-	8.00	5.33
12	32	Amherst Corp St. 1	20	-	1.00	5.00
12	45	Amgen	51	-	5.10	10.66
12	29	Amer. Dynamics 35	22	-	8.00	35.00
12	19	Amer. Express 60	22	-	4.75	21.55
12	15	Amer. Medical St. & T. 51	22	-	5.00	4.54
12	15	American St. 1	16	-	1.00	6.25
12	14	American States 51.2	55	-	5.00	4.53
12	14	Americorp N.Y. 51	15	-	1.00	6.67
12	14	Bell Atlantic St. 1	92	-	4.00	4.33
12	14	Bethlehem Steel 50	15	-	1.00	5.33
12	92	Bethpage St. 50	92	-	1.00	5.33
12	15	Bell Telephone 100	17	-	5.10	4.17
12	91	Brown-Boveri 75	39	-	5.00	12.82
12	28	CPC Intern. 25c	20	-	1.00	12.50
12	17	CSX St. 1	72.00	-10	2.00	9.76
12	53	California Engr. 15c	51	-	9.25	1.65
12	17	Campbell Soup 15c	23	-	9.25	6.52
12	15	CareMark St. 12.5	23	-	9.25	6.52
12	17	Chase Banking Corp.	52	-	2.75	5.20
12	13	Chrysler 56 c.	51	-	2.75	4.88
12	14	Citcorp St. 1	19.2	-	1.00	5.20
12	13	Citgo Pet. Fin. Corp.	15.00	-	1.00	1.77
12	15	Colgate-Palmolive St. 1	35	-	5.25	14.29
12	11	Com. Freightways 62.5c	18	-	9.00	4.88
12	10.1	Conn. Bank Corp St.	15	-	9.00	4.88

Continued on next page

Money Market Bank Accounts

LONDON SHARE SERVICE

© Latest Share Prices are available on FT Cityline. To obtain your free Share Code booklet ring the FT Cityline help desk on 01-922-2122

AMERICANS—Contd										BUILDING, TIMBER, ROADS—Contd										DRAPERY AND STORES—Contd										ENGINEERING—Contd										INDUSTRIALS (Miscel.)—Contd										INDUSTRIALS (Miscel.)—Contd									
1989	Law	Stock	Price	5	5	5	5	5	5	1989	Stock	Price	5	5	5	5	5	5	5	5	1989	Stock	Price	5	5	5	5	5	5	5	5	1989	Stock	Price	5	5	5	5	5	5	5	5	1989	Stock	Price	5	5	5	5	5	5	5	5						
2276	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2277	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2278	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2279	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2280	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2281	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2282	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2283	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2284	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2285	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2286	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2287	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2288	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2289	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2290	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2291	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2292	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2293	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2294	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2295	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2296	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2297	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5																	
2298	Collect Star Inc.	Stock	249	7	5	5	5	5	5	2009	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5	5	5	5	5	5	5	5	2276	Stock	Price	5																								

WORLD STOCK MARKETS

CANADA																	
Sales	Stock	High	Low	Close	Change	Sales	Stock	High	Low	Close	Change	Sales	Stock	High	Low	Close	Change
TORONTO Closing prices June 30																	
Quotations in cents unless marked \$.																	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5		170.00		170.00		170.00		170.00	
2000 AMCA Int.		\$65		400		405		5									

...today's business and financial executives rely on the Financial Times. The FT has breadth and depth of vision, an eye for events that are often in shadow and pinpoint accuracy in its coverage and analysis. Each day the FT gives you a new, crucial, clear snapshot of a global economy that's in constant motion.

...today's business and financial executives rely on the Financial Times. The FT has breadth and depth of vision, an eye for events that are often in shadow and pinpoint accuracy in its coverage and analysis. Each day the FT gives you a new, crucial, clear snapshot of a global economy that's in constant motion.

To order in the U.S. call 1-800-344-1144. In Canada 1-800-543-1007.

FINANCIAL TIMES

FINANCIAL TIMES

14 East 60th Street • New York, NY 10022 USA

3pm prices July 3

NEW YORK STOCK EXCHANGE COMPOSITE PRICES



NYSE COMPOSITE PRICES

12 Month P/E
High Low Stock Div. Yld. E 788 Weight Low
Continued from previous Page

Sales figures are unofficial. **Yearly highs** and **lows** reflect the previous 52 weeks plus the current week, but not the latest trading day. Where a split or stock dividend amounting to 25 percent or more has been paid, the year's high-only range and dividend are shown for the new stock only. **Unless otherwise stated**, rates of dividend are annual disbursements based on the latest declaration. **a**-dividend only strategy. **b**-annual rate of dividends plus stock dividend. **c**-liquidating dividend, **cl**-called. **d**-new yearly low. **dividend declared or paid** in preceding 12 months. **d**-dividend declared after split-up or stock dividend. **d**-dividend declared, **delisted**, **delisted**, or **no action taken** at latest dividend meeting. **d**-dividend declared or paid this year, an **extraordinary move** with dividends in arrears. **n**-new issue in the past 52 weeks. **The high-low range** begins with the start of trading. **f**-next day delivery. **PIE** price-earnings ratio. **r**-dividend declared or paid in preceding 12 months plus stock dividend. **s**-stock split. **Dividends begin** with date of split. **st**-stock dividend paid in stock in preceding 12 months, estimated cash value on ex-dividend or ex-distribution date. **u**-new yearly high. **trading halted**, **wi**-in bankruptcy or receivership or being reorganized under the Bankruptcy Act, or securities assumed by such companies. **wd**-distributed. **wd**-when issued. **ws**-with warrants. **x**-ex-dividend or ex-rights. **xx**-ex-distribution, **xx**-ex-warrants. **y**-ex-dividend and sales infofull. **yield**-yield, **yield**-yield.

OVER-THE-COUNTER

*Nasdaq national market,
3pm prices July 3*

AMEX COMPOSITE PRICES

Class	Class	Stock	Div.	IV	Size	Low	Close	Chg
				100%	High	Low	Close	Chg
25%	-	ProGeo	5	3	52	52	52	-
25%	-	Prism	14	10	34	34	34	-
25%	+ 4	ProGrid	.42	11	4	34	35	-2
25%	-	ProGrid		13	30	34	34	-2
25%	-			-	H-R	-	-	-
25%	-	PNW		16	8	75	75	-
25%	-	Riegel		19	20	134	134	-
25%	-	Rogers	.12	17	17	215	214	-1
25%	-	Rudick	.40	14	4	235	235	-
25%	-			-	S-E	-	-	-
25%	-	Schell	.26	89	10	154	154	-1
25%	-	Sequoia	.55	1	170	170	170	-2
25%	-	Siemco	.32	29	2	26	26	+1-10
25%	-	SpecOp		15	24	34	34	-
25%	-	Spring		19	20	54	54	+1
25%	-	Startek	.54	5	5	34	34	-2
25%	-	StarTech		12	7	52	52	-2
25%	-	Synaloy	200	5	13	94	94	-4
25%	-			-	T-T	-	-	-
25%	-	TIE		143	1	15	15	-1
25%	-	Teknord	.22	19	1	24	24	-1
25%	-	TempeS		22	35	244	244	-1
25%	-	Teledia		93	15	384	384	-1
25%	-	Telough		51	2	2	2	-
25%	-	TempeS	220	163	103	104	104	-1
25%	-	Textair		1659	154	104	104	-1
25%	-	Thermal		120	31	184	184	-2
25%	-	ThruNet		31	104	175	174	-1
25%	-	TopNet	.20	8	25	52	52	+4
25%	-	TowCity		13	81	52	52	-
25%	-	TRIM		14	18	174	172	-1
25%	-	Tobitex		206	47	47	47	-
25%	-			-	U-U	-	-	-
25%	-	Unisys	.30	7	5	55	55	-
25%	-	UpfrontA		7	140	2	2	2
25%	-	US Cell		25	34	34	34	-4
25%	-	UpNet		38	488	24	72	+1
25%	-			-	V-W	-	-	-
25%	-	VIAMC	4.05	18	40	254	275	-21
25%	-	VIATech		8	3	2	15	-1
25%	-	WaagB	.36	288	75	72	72	-1
25%	-	WaagC	.11	39	75	72	72	-1
25%	-	WebNet	1.84	21	4	234	224	-1
25%	-	WhizNet		63	10	12	12	-2
25%	-	WellNet		5	450	104	95	-1
25%	-	WellGrid		16	12	108	94	-1
25%	-	Worth		12	12	94	94	-1
25%	-			-	Y-Z	-	-	-
25%	-	Yankee		12	12	12	12	-
25%	-	Zeta		12	12	12	12	-

Travelling on Business in the Netherlands?

Enjoy reading your complimentary copy of the Financial Times when you're staying in Amsterdam at the Ascot Hotel, American Hotel, Apollo Hotel, Barbizon Centre, Barbizon Palace, Doelen Crest Hotel, Grand Hotel Krasnapolsky, Garden Hotel, Hilton Hotel, Marriott Hotel, Schiphol Hilton Hotel, Sonesta Hotel, Victoria Hotel

Free hand delivery service

service
Free hand
delivery service
for all subscribers
who work in the
business centres

of
LISBOA

LISBOA
AND

PORTO

Lisboa

887844

And ask
Roberto Alvarado

ROBERTO ALVAREZ
for details.

FINANCIAL TIMES

AMERICA

Dow repairs some of last week's damage

Wall Street

REPAIRING some of the damage from last week's steep falls, Wall Street stock prices edged ahead in light pre-holiday trading yesterday, writes *Roderick Orman* in New York.

The slight improvement came in spite of continuing concern that the economy was slowing down so rapidly that corporate profits would start to be eroded.

The worries were underscored by the latest report of purchasing managers' sentiment. For the second month running they turned in a reading below 50 per cent, indicating an economic slowdown. The reading of 48.8 per cent in June, against 49.7 per cent was the lowest level since July 1986. New orders, one of the major components of the report, declined for the first

time since May 1986.

In spite of this news, a few bargain hunters were picking up stocks after their sharp falls last week when the Dow Jones Industrial Average shed 92 points, its worst weekly performance in 15 months.

By 2pm yesterday the Dow was up 10.6 points at 2,460.11, although it had been up nearly 10 points at its best point during the morning. Most of the strength was in the blue chips, with secondary and utility stocks faring less well.

The American Stock Exchange composite index was slightly down for the day and the over-the-counter composite was barely ahead.

Trading was very light, with most investors and traders taking the day off ahead of today's Independence Day closure. Some Japanese staff had taken the extra day's vacation, one Japanese securities firm

reported. By early afternoon, fewer than 50m shares had traded on the New York Stock Exchange, a volume more appropriate for a busy opening hour. The same number of stocks rose as fell.

The market's real test will come in the second half of the week, when business returns to normal and the Federal Reserve's Open Market Committee meets to decide whether to ease monetary policy further.

The bond market, despite slipping a bit at the long end yesterday, is baring on lower interest rates. The stock market is drawing little encouragement from this at the moment, however, and is concentrating on a gloomier scenario of economic weakness. Opinion is divided on whether stocks can reclaim quickly the ground they gave up last week.

Among notable issues yester-

day, General Nutrition gained 5% to \$10.7. The health food and cosmetics group accepted an \$11-a-share leveraged buy-out proposal from Thomas H. Lee, a Boston investment firm.

First Executive dropped \$1 to \$15.4%. The Los Angeles-based company, the 15th largest insurance group in the US, has adopted an anti-takeover package for shareholders. The company, a pioneer in heavy investment in junk bonds, has been the subject of frequent takeover rumours.

LN Broadcasting gave up a further 3% to \$11.2. The television station and cellular telephone company suffered a court setback on Friday which means it has yet to receive a takeover offer from McCaw Cellular Communications.

The appeal court decided to overturn a lower court ruling denying it the chance to buy out its cellular partner in New York City and Philadelphia at 1986 prices. The ruling diminishes the value of the company and might cause McCaw to lower its \$120-a-share offer. McCaw was unchanged at \$38.

Minnetronics dropped 2% to \$22. The maker of fragrance and personal care products accepted a \$22.56-a-share take-over offer from Unilever.

Although the bid was the highest received, it was well below market forecasts.

Digital Equipment added 32% to \$24. The highly volatile stock of the computer maker has been receiving favourable press mention after launching for a long period.

Other computer stocks were little changed. IBM edged up 3% to \$112.6, Apple Computer fell 3% to \$94.4, Hewlett-Packard slipped 3% to \$89.7 and Unisys slipped 3% to \$24.4. Canadian markets were closed for Canada Day.

EUROPE

Active Frankfurt strides ahead as bourses snooze



BROKERS' WORLD

Where in the world would you find a stockbroker who spends the summer on a remote island, ferry and car? In which capital city can a gift dealer be found, outside office hours, chafed up and acting in a play about devils? How does a former diplomat come to be warning yippe analysts in Madrid to stay away from the discotheques in the early hours of the morning? And why has a broker in Toronto been fielding anxious calls from Hong Kong in the wake of the bloodbath in Peking? All will be revealed in a summer series about stockbrokers around the world, starting on Thursday.

Hoogovens, the steel com-

pany, had a good day, rising F1.50 to F1.18, while Unilever gained 31 cents to F1.14. After news over the weekend that it was buying Calvin Klein Cosmetics of the US, Unilever this year, Unilever made an abortive attempt to take over Fabergé and Elizabeth Arden.

Retailer Ahold added 40 cents to F1.17.0 after denying speculation that a Danish and a Swedish company would take part in an alliance between Ahold, France's Casino and Argyl of the UK.

MADRID was depressed by interest rate worries and the setback on Wall Street last week and trading was quiet at about \$50m. The general index fell 1.5% to 308.05.

BRUSSELS had a dull session with operators reluctant to take out new positions on the last day of the forward market account. The cash market index fell 25.06 to 6,073.1K.

Volume was low in all stocks except sugar refiner Raaffinede Tijlmonroisse, which added BFR30 to BFR2.100 as speculation continued about stake-builders.

STOCKHOLM recovered from early losses to close only slightly lower on the day. The Aktiemarkten General Index fell 0.7 to 1,216.2 in slack trading.

Skandia went against the trend, rising SKR2 to SKR2.00. Electrolux free B shares fell SKR2 to SKR2.00 and Volvo free B shares also fell SKR2 to SKR2.

OSLO saw dull trading and shares closed mostly lower with the all-share index falling 1.94 to 483.73.

ASIA PACIFIC

Nikkei beats election setback to close higher

EQUITY trading slowed to its lowest level this year as uncertainty surrounding the outcome of Sunday's Tokyo Metropolitan Assembly election kept investors wary, writes *Michiko Nakamoto* in Tokyo.

Share prices lost steadily in early trading when investors scrambled to unwind positions or take profits as the election outcome for the ruling Liberal Democratic Party (LDP) began to look increasingly bleak.

However, a feeling of relief, once news of the serious setback for the LDP was out, triggered a round of broad-based buying that enabled share prices to close higher for the first time in five trading days.

The Nikkei 225 opened more than 200 points below Friday's close and fell 252.54 points to a low of 31,886.54. Late bargain hunters came in to support the Nikkei which closed at the day's high of 33,264.2, up 287.73.

It was the first time in three trading days that the Nikkei had closed above 33,000. Advances far outpaced losses by 620 to 268 while 162 issues were unchanged.

The Topix index of all listed shares added 17.77 to 2,467.15 in London, the ISE/Nikkei 50 closed 3.32 below the Tokyo close at 1,951.31.

Volume in Tokyo sank to a year's low of 305.91m shares, down from the already slim 423.27m traded on Friday, reflecting widespread hesitation among investors to take positions while political concern hung over the market.

Mr Shoin Yokoyama of Credit Suisse Investment Advisory Co said that as well as relief, yesterday's rebound could also be explained by the fact that investors had already sold more or less what they had to sell.

Interest returned to large capital steel and shipbuilding stocks as the yen rebounded against the dollar during the day. Mitsubishi Heavy Industries topped the most active list with 8.2m shares and gained Y120 to Y119. Nippon Steel fell 1.90 with 8.0m shares, adding Y18 to Y118.

Matsumita Communication Industrial, an industrial electronics affiliate of Matsushita Electric, surged Y190 to a year's high of Y3,350 in active trading. It has a 30 per cent share of the domestic mobile phone market and is expected to benefit from an expanding market.

Large volume issues led the Osaka market where the OSE average rose 98.55 points higher at 32,277.45. Volume

slipped to a year's low of 23,040m shares from Friday's 40,659m. Sumitomo Precision, which is expected to post a second consecutive year of record pre-tax profits this business year, surged Y160 to Y147.

Roundup

THE tone was depressed in Asia Pacific markets, as last week's setback on Wall Street hit sentiment and the slight recovery in Tokyo yesterday

had to sell.

Brierley Investments, reported to be reconsidering its support for Goodman Fielder Wattie's bid for IEL, shed 5 cents to A\$1.30. IEL and Goodman also both lost 5 cents to A\$2.05 and A\$2.11. It later emerged that textile magnate Mr Abe Goldberg was teaming up with two IEL executives to halt the merger with Goodman and take IEL over as an independent company.

NEW ZEALAND fell heavily

in line with the Australian market and the Barclays Index lost 22.19 to 1,901.29.

HONG KONG showed little movement in a very quiet day, with fund managers unwilling to rush into new positions at the start of the second half, especially given the holiday in the US today.

The Hang Seng index lost 3.1 to 2,270.81 in low turnover of HK\$460m, with investors awaiting indications of the impact of the China crisis on the local property market.

Hongkong Bank saw active trading, unchanged at HK\$740. Bond Corp International lost 2 cents to HK\$1.55 after announcing a meeting on Thursday to consider a further special dividend because of its Bond Centre sale.

SEoul picked up steeply after hitting a year's low on Saturday. The composite index gained 19.6 to 865.90 in thin volume.

SINGAPORE moved lower in heavy trading, with small investors responsible for most of the activity and Wall Street's losses casting a shadow. The Straits Times industrial index fell 9.61 to 1,298.06, down 100.5m shares, 100.5m shares, down from Friday's 1,277.4m. Falls led rises by 140 to 41.

Among blue chips, Fraser and Neave dropped 30 cents to S\$8.50 and Singapore Airlines foreign shed 20 cents to S\$11.20.

TAIWAN plunged on talk that a leading player had been detained for involvement in illegal trading activities, though officials denied the rumours. The weighted index ended at 8,833.61, down 351.45.

HONG KONG showed little movement in a very quiet day, with fund managers unwilling to rush into new positions at the start of the second half, especially given the holiday in the US today.

The Hang Seng index lost 3.1 to 2,270.81 in low turnover of HK\$460m, with investors awaiting indications of the impact of the China crisis on the local property market.

Hongkong Bank saw active trading, unchanged at HK\$740. Bond Corp International lost 2 cents to HK\$1.55 after announcing a meeting on Thursday to consider a further special dividend because of its Bond Centre sale.

SEoul picked up steeply after hitting a year's low on Saturday. The composite index gained 19.6 to 865.90 in thin volume.

SOUTH AFRICA

A QUIET session in Johannesburg yesterday saw shares close mostly firmer, apart from a few ex-dividend related losses.

The computer breakdown

Heavyweights drag world down

By Jacqueline Moore

ECONOMIC and political worries furred brows in leading stock markets last week, dragging the FT-Actuaries World Index lower.

The US was the world's worst performer, falling 3 per cent in local currency terms. A mixture of economic nervousness and programme trading undermined share prices, with the Dow Jones Industrial Average falling steeply on four days last week. The largest retreat was on Thursday, when the Dow shed more than 40 points after the West German Bundesbank had unexpectedly raised interest rates.

US investors also became more concerned that a slowdown in the economy would damage corporate earnings. Fears of recession were exacerbated with the announcement on Wednesday of a higher-than-expected fall in the index of leading indicators.

Japan, beset by political doubts, dropped 1.7 per cent over the week, reducing its gain in 1988 to just 2.9 per cent. A combination of fears that the

ruling Liberal Democratic Party would suffer in the weekend's elections and that Prime Minister Sosuke Uno would resign after the scandal over his private life kept investors away and confidence low.

West Germany, France and the Netherlands also suffered — each falling by more than 1 per cent in the wake of interest rate rises. Such declines by the heavyweight markets left the World Index 1.6 per cent lower.

Not all markets had a bad week, however. Mexico and Austria both fell by about 2 per cent but these were still setbacks compared with their impressive advances this year.

A couple of Scandinavian bourses even achieved significant gains. Denmark and Sweden, two of Europe's top performers this year, corrected their previous week's losses, gaining 3.1 and 1.1 per cent respectively.

South Africa also had a difficult five days, buoyed by the bullion price and by its industrial stocks. Hong Kong continued to scoop losses around as the Chinese situation stabilised, although it is still 15.9 per cent down this year.

MARKETS IN PERSPECTIVE

	% change in local currency †					% change in sterling †
	1 Week	4 Weeks	1 Year	Start of 1989	Start of 1988	
Austria	-1.38	-0.16	+51.19	+38.43	+47.26	
Belgium	-0.35	-1.66	+15.95	+4.28	+11.21	
Denmark	+3.10	+10.42	+70.51	+90.32	+37.34	
Finland	+0.20	-3.50	+8.22	+13.16	+25.17	
France	-1.91	-1.93	+33.33	+13.00	+20.48	
West Germany	-1.43	+3.24	+25.46	+11.12	+17.80	
Ireland	-0.13	-3.32	+7.17	+11.75	+17.92	
Italy	+0.40	+8.44	+23.08	+7.14	+15.65	
Netherlands	-1.01	+1.72	+23.28	+15.99	+23.20	
Norway	-1.32	+0.77	+56.70	+39.46	+49.81	
Spain	-0.04	-0.34	+0.30	+9.51	+16.67	
Sweden	+1.06	+5.10	+49.50	+24.10	+33.54	
Switzerland	-0.63	+5.31	+11.85	+14.57	+19.78	
UK	-0.75	+2.43	+14.87	+18.84	+18.84	
EUROPE	-0.80	+2.30	+18.71	+15.28	+19.27	
Australia	+0.80	-1.28	-1.34	+2.50	+5.95	
Hong Kong	+2.13	+8.65	+12.00	+15.06	+1.06	
Japan	-1.47	+1.76	+15.05	+1.95	+4.28	
Malaysia	+1.12	+1.12	+22.40	+22.40	+22.40	
New Zealand	-0.22	+2.74	+22.40	+26.94	+47.54	
Singapore	+0.47	+1				